NORTH RED DEER RIVER WATER SERVICES COMMISSION



NOTICE OF MEETING
REGULAR MEETING
May 27, 2013
9:00 AM

LACOMBE CITY HALL

AGENDA

- 1. Call to Order
- 2. Adoption of Agenda
- 3. Adoption of Minutes (attached)
 - a. April 8, 2013 Regular Meeting
- 4. Correspondence (attached)
 - a. City of Red Deer 2012 True-up Per the Water Supply Agreement
 - b. Alberta Environment A Guide for Members of Municipal Council
- 5. Reports (attached)
 - a. Operations
 - b. Administrator
 - i) Monthly Report
 - ii) Financial April 2013
- 6. Old Business
- 7. New Business
 - a. Operation and Administration Contract (attached)
- 8. Next Meeting Date
 - a. To be decided
- 9. Adjournment

NORTH RED DEER RIVER WATER SERVICES COMMISSION REGULAR MEETING MINUTES

April 8, 2013

In Attendance: Mayor Steve Christie, Chairperson, City of Lacombe

Mayor Larry Henkelman, Vice Chairperson, Town of Ponoka

Mayor Melodie Stol, Town of Blackfalds Councillor Cliff Soper, Lacombe County

Michael Minchin, Corporate Services Director, Lacombe, NRDRWSC Administrator

Jennifer Peterson, Administrator Assistant, Lacombe

Others Present: Daniel Luymes, BDO Canada LLP

Chris Huston, Infrastructure Services, Lacombe, NRDRWSC Operations

Matthew Goudy, Infrastructure Services Director, Lacombe

Jordan Thompson, Engineer Manager, Lacombe, NRDRWSC Engineering

Norma MacQuarrie, CAO, Lacombe

Preston Weran, Director of Infrastructure, Town of Blackfalds

Terry Hagar, County Commissioner, Lacombe County

Regrets: Reeve Gord Svenningsen, Ponoka County

1. Call to Order:

Chairperson Christie called the meeting to order at 9:01 am.

2. Adoption of the Agenda:

MOVED by Mayor Henkelman that the agenda for April 8, 2013 be adopted as presented.

CARRIED

3 a.

3. Adoption of the Minutes:

MOVED by Mayer Stol that the minutes for December 5, 2012 be adopted as presented.

CARRIED

4. Presentation:

Mr. Luymes presented the 2012 Audited Financial Statements.

Mr. Minchin noted the following:

- No. 9 Accumulated Surplus has been changed to reflect the Board's new policies on budgeting and reserves,
- Management Letter, the comments and concerns expressed have been taken into consideration by management and addressed.

MOVED by Mayor Stol that the 2012 Audited Financial Statements be approved as presented.

CARRIED

Mr. Luymes left the meeting.

5. Correspondence

Mr. Minchin presented a letter from the City of Red Deer confirming the finalized 2013 water rate.

6. Reports

Operator's Report

Mr. Huston discussed the recent activities.

In summary:

- Responded to 937 Alberta One Call locate requests in 2012; 123 so far in 2013.
- Operations has responded to a number of issues at a number of the water reservoirs, regarding the actuator valve not responding properly. Operations is acquiring quotes from vendors on the replacement of the existing value with a proper actuator value.

Mr. Goudy advised the Commission that he will no-longer be attending; going forward Jordan Thompson, Engineering Manager, will be attending.

Administrator's Report

Mr. Minchin briefly discussed recent activities.

In summary:

- Has been in discussions with Mike Reid of Evraz regarding possible water service.
 Further discussed under New Business.
- Notified area fire chiefs regarding changes to water outlets that were being used as hydrants.
- 2012 audited financial statements are complete. Lower operating expenses as well as a lower budgeted water rate resulted in a higher than budgeted surplus.

Financial Report

Mr. Minchin presented a financial report.

In summary:

- As the end of February the financials are right on target
- Accounting changes have occurred. Billing went from twice a year to every month.

7. Old Business:

North Red Deer Wastewater Commission – Right of Way Acquisition

Mr. Minchin presented an update on the statue.

In summary:

- There is no specific planning for including a regional waste water line.
- Feasibility study will be completed by the Regional Wastewater Commission as part of its business case study.
- The Commission will require approval from the Minister before any disposal or sale of the Commission's assets which would include the value of Commission's right of way.

MOVED by Councillor Soper to accept as information.

CARRIFD

8. New Business:

Credit Card Policy

Mr. Minchin presented a draft Credit Card Policy for consideration. He advised the Commission that Administration's plan is to only issue one card, to the Operations Manager.

MOVED by Mayor Stol to approve the Credit Card policy as presented.

CARRIED

<u>Banking Service Agreement – Servus Credit Union</u>

Mr. Minchin presented for consideration a Banking Services Agreement from Servus Credit Union.

Key points discussed are as follows:

- In the summer of 2012, the City of Lacombe awarded a five year banking agreement to Servus after undertaking a request for proposal.
- The NRDRWSC named Servus Credit Union as its banking institution in 2004. The agreement expired prior to 2009.
- Administration recommends that the Commission enter into a new agreement with Servus Credit Union rather than issuing a separate RFP.

MOVED by Councillor Soper that the NRDRWSC enter into a five (5) year banking service contract with Servus Credit Union.

CARRIED

<u>Request for Water Service – EVRAZ</u>

March 3rd the Commission received a request from EVRAZ Inc. for water service, located north of the Chiles Industrial Park. Mr. Minchin requested that Evraz discuss this request with the City of Red Deer. Have not heard back from Evraz as of yet.

Key points discussed are as follows:

- No capacity impact in the short term but could be long term.
- Evraz is a city customer.
- Agreements should be with the municipality and not an individual customer.
- Economic benefit for the Commission.
- Red Deer's area structure plan for the north area should be completed by end of this year. A plan for water may be available then.

MOVED by Mayor Stol that the Commission is not opposed to continuing negotiations with Evraz of the sale of water via the City of Red Deer, based on the six (6) principals outlined by Administration.

CARRIED

9.	In	Ca	m	er	a

MOVED by Councillor Soper that Commission move in camera at 9:55am to discuss the following item:

Operation and Administration Contract

CARRIED

Mr. Minchin, Mr. Huston and Mr. Goudy left the Chambers at 9:55 am.

MOVED by Councillor Soper to return to open meeting at 10am.

CARRIED

MOVED by Mayor Stol to request the City of Lacombe bring an Administration proposal to the Commission for consideration for the management of NRDRWSC at the next Commission meeting.

CARRIED

10. Next Meeting:

May 27, 2013 at 9am, City of Lacombe Council Chambers.

11. Adjournment:

MOVED by Mayor Henkelman to adjourn this April 8, 2013 NRDRWSC Meeting at 10:09am.

CARRIED

Chairperson	Administrator



May 7, 2013

Michael Minchin, Commission Administrator North Red Deer River Water Services Commission c/o Town of Lacombe 5432 – 56 AVE Lacombe AB T4L IE9

Dear Mr. Minchin,

Re: 2012 True-up Per the Water Supply Agreement

A true-up calculation has been completed for the 2012 year. The North Red Deer River Water Services Commission (NRDRWSC) paid a 2012 forecasted price of \$1.184 per cubic meter. After the completion of the year-end an actual cost of \$1.0735 has been determined.

The 2012 NRDRWSC actual volume was 2,472,133 cubic meters, vs. the forecasted volume of 2,566,000. The difference in the forecast versus actual cost per cubic meter is \$0.1105, resulting in a variance of 9.33%. As the variance is within 10%; there is no refund or balance due. The agreement states "The exception to this would be when the actual costs and/or consumption (sales) result in an actual cost per cubic metre variance greater than ten percent (10%) of that forecasted for the Commission. In that case a "true-up" transaction will be done to reconcile the forecasted with the actual. A resulting invoice or payment would then be issued to the Commission for the determined amount.

Yours truly,

Tom Warder, P. Eng.

Environmental Services Manager

SM/Ims

c Environmental Services Office Supervisor

Closer to Home (C2H)

Smaller Centres Water & Wastewater Capacity Renewal Initiative*

April 2013

To Alberta Municipal Affairs designated local Chief Administrative Officers (CAOs)

Re: Information update on water and wastewater capacity supports - Spring 2013

Dear CAO,

Water and wastewater utility issues are proving some of the most challenging and complex for a local government. Over the last year, through the C2H Initiative, small teams have been addressing many of the capacity issues which challenge smaller Alberta communities to consistently provide safe drinking water and responsibly manage wastewater.

Supports and tools for municipalities continue to be offered and developed in 2013 to make the job a bit easier. We continue to be concerned about reports of confusion among many local administrators and councils about the safety and regulatory requirements for water and wastewater operations. We're pleased to re-issue a complimentary copy for CAO office reference use of Taking Care of Your Drinking Water and Wastewater: A Guide for Members of Municipal Councils.** This Alberta Environment and Sustainable Resource Development (AESRD) guide is a starting point to help organize oversight and compliance information as a desk reference. A copy of the Guide has also been sent to your designed Chief Elected Official. Operators have separate access to the Guide. Other helpful resources can be accessed at:

- AESRD *Drinking Water Safety Plan* (DWSP) information for new DWSP requirements: http://environment.alberta.ca/apps/regulateddwq/DWSP.aspx
- May 2012 Information Letter on DWSP completion: http://environment.alberta.ca/04010.html
- Monthly *WaterWise Alberta* Information Session for local elected officials and administrators (3rd Thursday of every month at noon): https://awwoa.ab.ca/home/content/1075
- AUMA Water microsite: http://water.auma.ca/
- Operational succession primer: https://awwoa.ab.ca/home/pdfs/C2H_Succession_2012.pdf
- Operations recruiting toolkit: https://awwoa.ab.ca/home/content/1064

We've also included a *What Can C2H Initiative Do For You?* flyer. We have DWSP completion support workshops planned for 2013, which could save your municipality time and resources. We'd love to hear from you. Our C2H Project Associate, Mr. Jeffrey Hanger is available at **C2HAssociate@awwoa.ca** or via phone at 1-877-454-7745, Ext 221 or 403-783-4164.

Sincerely,

** a PDF copy of the Guide is accessible at http://environment.alberta.ca/03992.html

Brian Brost & Garth Carl Project Executive Group Co-Chairs, C2H Initiative

* Closer to Home Project Development Office c/o AWWOA Provincial Office 10806-119 Street NW Edmonton • Alberta • Canada • T5H-3P2 **Project Administration**



DRINKING WATER SAFETY PLAN RELATED NOTICES (SPRING 2013)

SMALLER ALBERTA MUNICIPALITIES – HAVE YOUR SAY!

Alberta is the first jurisdiction in North America to implement the World Health Organization's (WHO), Water Safety Plan approach, through Alberta Environment & Sustainable Resource Development's mandated Drinking Water Safety Plans (DWSPs).

The Canadian Water Network (CWN), a national research network of excellence, has funded a project to study the experience of smaller Alberta municipalities as DWSPs are being implemented. A researcher from the Centre for Water Studies at Dalhousie University will be in Alberta throughout the next several months to conduct interviews with local elected officials, senior administrative officials, and water utility operators about their DWSP experiences.

If you would like your community to assist with this study, please see the information circular at https://awwoa.ab.ca/home/pdfs/DWSP_Research_Project_Description.pdf, or contact the field researcher directly by email at **Kelsey.Chandler@dal.ca** or by phone at **(250) 619-7819**.

INFORMATION LIST OF RESOURCES FOR SMALLER COMMUNITIES

The Secretariat of the Council of the Federation (i.e., council of Canadian provincial/territorial Premiers) has recently commissioned a fact-finding study to assess information gaps in the information and resources available to assist smaller municipalities and communities with preparing and maintaining their Drinking Water Safety Plans (DWSPs). An early outcome of the study, made available on the web in late March 2013, is an inventory of existing resources from several jurisdictions. The inventory is available for viewing/downloading of documents at:

http://centreforwaterresourcesstudies.dal.ca/Guidance_Documents

GROUP ASSISTANCE IN DRINKING WATER SAFETY PLAN (DWSP) COMPLETION

Following the initial development and subsequent review by local councils, Alberta's new Drinking Water Safety Plans (DWSPs) are to be **maintained on an annual basis**, consistent with the intent DWSPs are an ongoing risk-management and continuous quality management tool.

To help local Approval Holders and their Operators in smaller Alberta communities get off to a good start in completing their first DWSP, as well as supporting the relationships that will be beneficial to maintaining DWSPs on an annual basis, the Closer to Home (C2H) Initiative is supporting several group-based opportunities to learn about, and complete, your first DWSP. If your municipality or community is interested in these opportunities please contact Jeffrey Hanger, C2H Initiative Project Associate in May or early June at C2HAssociate@awwoa.ca

Closer to Home (C2H) Initiative

A Smaller Communities Water and Wastewater Capacity Opportunity

What Can C2H Initiative Do for You?

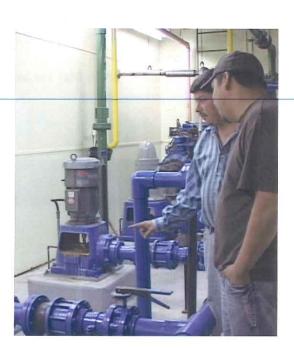
Getting Deadly Serious about Water!

The C2H Initiative aims to work with local leaders to increase the capacity of smaller Alberta communities (communities of < 5,000 residents or areas of approximately 20,000 residents) to consistently provide safe drinking water and manage wastewater responsibly. You might believe this is only the job of local water and wastewater operators. It's not!

It's a shared responsibility among Owners, represented by local elected councils working with municipal administrative and public works officials, certified operators, and citizens working together to meet provincial and federal requirements for safe drinking water and responsibly managed wastewater. No community leader or citizen-ratepayer wants family, friends or others to become ill and possibly die because of unsafe water or wastewater. We need tools and resources to support our local operators, officials and citizens to ensure that our communities remain safe.

The C2H Initiative, funded in part by the Rural Alberta Development Fund (RADF) is providing you many of the supports you and your community may need. It provides you with a chance to better learn

- what are the supports your community might need;
- what are the tools you may be missing; and
- who can offer you additional support on an ongoing basis.



Owners in most Alberta First Nations use Circuit Riders to aid in local operations, maintenance, and compliance



A distribution systems operator performs leak detection tests in Okotoks, Alberta



A village operator performs daily monitoring in Champion, Alberta

How We Can Help

- 1. Learn More/Share More Each month in 2013 a one-hour information session accessible by either a toll-free teleconference or an Internet-accessible Adobe Connect® webinar is offered. During these WaterWise Alberta sessions, elected officials and administrators in a capacity as facility and system 'Owners' can learn about compliance issues, share questions, and increase awareness of water and wastewater issues. Knowledgeable people will discuss owner and operator responsibilities as well as current issues, policies, and programs, including what provincial and federal government support may be available.
- 2. Save on Your Training Effective July 1, 2012 to December 2013, a 25% subsidy on all AWWOA classroom courses taken by AWWOA member-

- operators working in public facilities serving 5,000 people or less is available. See *Training Subsidy* at https://awwoa.ab.ca/home/content/1015 for details.
- 3. Inform Skilled People Career attraction video clips and downloadable brochures have been developed to help you inform and attract new people to water and wastewater occupations. These are available as the no-cost Recruiting Toolkit accessible at https://awwoa.ab.ca/home/content/1064.
- 4. Tools for Responsible Action Contributing to the C2H Initiative, Alberta Environment & Sustainable Resources Development has made available a tool called Taking Care of Your Drinking Water and Wastewater: A Guide for Members of Municipal Councils. Coil bound copies were sent to CAOs of communities <5,000 on the Alberta Municipal Affairs list in July 2012. A PDF version is available at http://environment.gov.ab.ca/info/library/8553.pdf
- 5. Additional Tools in Development Tools are in development to assist with local capacity-strategies such as Operator Consortiums (shared services of operators with other communities), local peer mentoring services, operational succession planning, and redevelopment of training materials to meet the future needs of communities.

The AWWOA will also streamline support of its distance learning offerings, to enable more use of local SuperNet facilities in local municipal centres, libraries, and community learning centres.

All projects are funded in part by RADF and are supported by a range of provincial partners.

Need More Information?

Jeffrey Hanger Project Associate Closer to Home (C2H) Initiative 1-877-454-7745, Ext 221 (toll-free) c2hassociate@awwoa.ca

Project Updates

https://awwoa.ab.ca/home/content/1062 Twitter @c2halberta



Taking Care of Your Drinking Water and Wastewater: A Guide for Members of Municipal Councils







Acknowledgements

Alberta Environment & Sustainable Resource Development would like to acknowledge the contribution of the Ontario Ministry of the Environment, as well as the following people in the development of this guidance document:

- Colin Blair, Director, Regional Integration Branch, Alberta Environment & Sustainable Resource Development
- Susan McRory, Environmental Prosecutions, Justice and Attorney General
- Dr. Donald Reid, Drinking Water Specialist, Regional Integration Branch, Alberta Environment & Sustainable Resource Development
- Bijan Aidun, Municipal Wastewater Specialist, Regional Integration Branch, Alberta Environment & Sustainable Resource Development
- Shanda Suggit, STEP, Alberta Environment & Sustainable Resource Development

This document was prepared by:

Kathy Abramowski, Drinking Water & Wastewater Operator Certification Program Lead, Alberta Environment & Sustainable Resource Development

Portions of this Guide have been reproduced and adapted from Ontario Ministry of the Environment, Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils ©Queen's Printer for Ontario, 2011

Legal Disclaimer: This guide should not be viewed as legal or other expert advice. It is a guidance document for information purposes only.

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Taking Care of Your Drinking Water and Wastewater: A Guide for Members of Municipal Councils

What You Need to Know About Your Drinking Water and Wastewater Responsibilities

Albertans expect that their water is of high quality and safe to drink. It is a matter not only vital to public health and quality of life, but also to the moral authority of government. As a member of municipal council, there is an important role for you to play in ensuring that your community's expectations are met – in fact, there is a legal duty requiring you to do so.

Here Are Three Things To Remember As A Municipal Councillor:

It's Your Duty. Alberta Environment & Sustainable Resource Development's Environmental Protection and Enhancement Act (EPEA) and its regulations include a legal duty for persons responsible for the waterworks and wastewater systems to ensure water is safe from contaminants and that operations are in compliance with the act. These duties can extend to the municipality and municipal councillors. There could be legal consequences for negligence, including possible fines, enforcement orders, and civil remedies (Read more on page 46 of this guide.)

Be Informed. Ask questions. Get answers. You don't have to be an expert in drinking water or wastewater operations, but you do need to be informed about them. Your decisions can have an impact on public health or the health of our environment. Seek advice from those with expertise and act prudently on that advice. (Check your knowledge on page 17.)

Be Vigilant. Complacency can pose a great risk to drinking water systems and wastewater management system(s). It is critical that you never take water safety for granted or assume all is well with the drinking water and wastewater systems under your care and direction. The health of the population using the drinking water from your community and the environment to which your community discharges its treated wastewater depends on your diligent and prudent oversight of your community's water and wastewater systems.



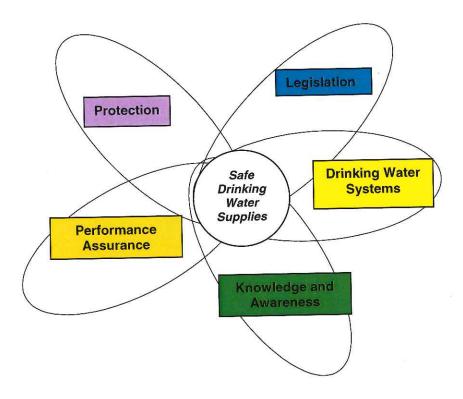
Understanding Your Responsibilities for Overseeing Drinking Water and Wastewater

Protecting Alberta's Drinking Water

Alberta Environment & Sustainable Resource Development uses a multi-barrier approach to ensure that safe drinking water is provided to Albertans. This method is referred to as a 'Source to Tap, Multi-Barrier Approach' or STMBA. The term 'source to tap' refers to the continuum water passes through – from a water body to the consumer's drinking water tap.

Barriers may be physical or administrative in nature. A physical barrier is a material object that impedes or separates, such as a filter. Physical barriers are quantitative in nature and allow for an assessment of tangible and measurable results. An administrative barrier is more conceptual and more difficult to quantify. For example, the cumulative effect that development (such as residential, commercial, industrial, forestry and agricultural activities) has on a watershed can dramatically impact water quality. Source protection planning to address cumulative effects is an example of an administrative barrier. It identifies risks and hazards impacting raw water supplies and allows for more informed decision-making with regard to activities and development in addition to lowering the risk of potential adverse impacts.

Alberta Environment & Sustainable Resource Development's and Water's STMBA consists of legislation, drinking water systems, knowledge and awareness, performance assurance, and protection.



A Legislative and Regulatory Framework for Protecting Water

Legislative and regulatory measures are key components of Alberta's source-to-tap multi barrier approach. This guide focuses on the *Environmental Protection and Enhancement Act* (EPEA) and its regulations, which provide a legislative framework for all approved public waterworks and wastewater systems. EPEA provides a set of province-wide standards and rules to ensure that Alberta's receiving environment are protected and Albertans have access to safe, high quality, reliable drinking water.

The Environmental Protection and Enhancement Act – An Overview

EPEA recognises that Albertans are entitled to safe water – both in the environment and from their taps. The act provides for the protection of human health by controlling and regulating waterworks systems and drinking water testing to prevent drinking water health hazards. It also ensures environmental protection by mandating effluent discharge quality and testing requirements through regulations on municipal wastewater programs.

In a municipal context, both waterworks and wastewater systems are considered. A waterworks system includes all the drinking water treatment, distribution, and storage infrastructure up to customer property lines. The wastewater system includes the collection system starting from customer property, pumping station, storage and treatment system to the point of discharge into the environment.

EPEA and its associated regulations specify the requirements for waterworks systems, wastewater systems, testing services, certification of system operators, and water quality analysis. It also sets quality standards and mechanisms for compliance and enforcement.

The Big Picture

There are over 700 public waterworks facilities registered in Alberta. These systems provide water to approximately 80 per cent of the homes in Alberta – that's more than 2.75 million people.

The persons responsible for these waterworks facilities are required to submit monthly and annual reports to Alberta Environment and Sustainable Resource Development. These reports summarize the results of the drinking water testing conducted during the month in laboratories licensed to perform these tests. Of the 569 facilities that submitted reports in recent testing, 99 per cent of these tests met the province's rigorous, health-based drinking water quality standards.

There are approximately 591 public wastewater systems in Alberta ranging from 395 wastewater stabilization ponds, 103 mechanical facilities and 93 wastewater collection and other systems serving over 3.2 million Albertans. The operation of these systems is regulated by EPEA and Regulations through approval or codes of practice. System owners and operators are required to regularly monitor the effluent quality and submit reports to Alberta Environment and Sustainable Resource Development. The monitoring and reporting frequency will depend on the type of treatment system and their potential for operational variation. The owners and operators are also required to immediately inform Alberta Environment and Sustainable Resource Development of any violation of their approval or Code of Practice. For example, Alberta Environment and Sustainable Resource Development must be immediately informed if the treated effluent quality exceeds the allowable limit or if there an unauthorised release of effluent from the systems.

Key Sections of the *Environmental Protection and Enhancement Act* (EPEA) and its Regulations for Municipal Councillors

Drinking Water Legislation

Part 7 of the EPEA relates to potable water in the province. Within that part, section 149 describes the legal responsibilities of persons responsible for waterworks systems. These responsibilities are expanded upon in the *Potable Water Regulation* (A. Reg. 277/2003) and the *Standards and Guidelines for Municipal Waterworks, Wastewater, and Storm Drainage Systems.* It is important for you to understand the scope of the day-to-day responsibilities of the persons responsible for your waterworks system.

Persons responsible for the waterworks system are responsible for ensuring that their drinking water systems:

- Provide water that meets all prescribed drinking water quality standards;
- Operate in accordance with the act and its regulations and are kept in a fit state of repair;
- Are appropriately staffed and supervised by qualified persons;
- Comply with all sampling, testing and monitoring requirements; and
- Meet all reporting requirements.

Examples of Actions Required of Persons Responsible for Waterworks Systems include:

- Obtaining samples with the frequency appropriate to the type of system and users as described in the *Guidelines for Canadian Drinking Water* or the approval or code of practice;
- Using an approved laboratory for drinking water analysis;
- Reporting adverse test results that contravene the approval or the Code of Practice verbally and in writing;
- Ensuring that operators are, or are under the direction of, a person with valid certification;
- Ensuring that the waterworks system is constantly staffed with the number of certified operators set out in the approval or code of practice;
- Preparing the annual and monthly reports as per the Standards and Guidelines for Municipal Waterworks, Wastewater, and Storm Drainage Systems;
- Using the Facility Risk Assessment Guidelines to conduct a risk assessment from sourceto-tap to ascertain integrity, reliability, and sustainability of the waterworks system to provide safe drinking water;
- Ensuring that the system is operating and performing in accordance with the Standards and Guidelines for Municipal Waterworks, Wastewater, and Storm Drainage Systems; and
- Obtaining an approval for a public waterworks system, which includes a contingency and emergency response plan

Wastewater Legislation

The statute governing the ownership and operation of wastewater systems is the *Wastewater* and *Storm Drainage Regulation* (A. Reg. 119/1993). It is complemented by the corresponding Codes of Practice and the *Standards and Guidelines for Municipal Waterworks, Wastewater, and Storm Drainage Systems*. These documents collectively describe the overall and day-to-day legal responsibilities for the persons responsible for the wastewater system.

Persons responsible for the wastewater system are responsible for:

- Ensuring that the substances used and released are not in concentrations that would impair the integrity of the system;
- Operating the system in accordance with the regulation and ensuring the system is kept in a fit state of repair;
- Appropriately staffing facilities with appropriately qualified persons;
- Complying with all sampling, testing and monitoring requirements; and
- Meeting all reporting requirements including immediately reporting any violation of the requirements outlined in their approval or Code of Practice for their facility.

Examples of Actions Required of Persons Responsible for Wastewater Systems include:

- Obtaining an approval or registration for a wastewater collection system, wastewater treatment plant and/or wastewater lagoon, which includes a contingency and emergency response plan;
- Ensuring that the day-to-day operations of the wastewater facility are supervised by one or more persons holding proper certification;
- Discharging effluent in accordance with the requirement of their approval or Code of Practice and in a manner that ensures that no appreciable water quality impacts occur;
- Disposing of biosolids/sludge in an environmentally acceptable manner as described in their approval or obtain a letter of authorization for land application of biosolids which will outline the requirements;
- Ensuring that the system is operating and performing in accordance with their approval
 or Code of Practice for their facility including taking measures to control odour created
 by a wastewater treatment facility;
- Collecting and preserving samples in accordance with the approval or Code of Practice for the facility;
- Having samples analysed and preserved by an approved laboratory;
- Reporting any discharges, overflows, or spills of raw wastewater or wastewater that does not meet effluent quality to Alberta Environment & Sustainable Resource Development by telephone; and
- Compile and submit an annual or monthly report as required for Alberta Environment & Sustainable Resource Development.

Who is a "person responsible" under the EPEA and its regulations?

A "person responsible" includes the owner, operator, or approval or registration holder of a waterworks or wastewater system. The term also includes the local authority that contracts to obtain potable water from the waterworks system, the local authority that grants a franchise for the supply of water by the waterworks system, and the local authority that contracts to discharge wastewater to the wastewater system or grants a franchise for the treatment and disposal of wastewater from the wastewater system.

The "owner" is often the municipality as a corporate entity. Members of municipal councils and municipal officials who provide oversight to this entity also provide oversight or exercise decision making authority in respect to the waterworks and wastewater systems it owns. These councillors and officials are responsible for having policies, management tools and processes in place so that the municipality can meet all of its legislative and regulatory requirements under EPEA and other tools.

The "operator" of a public waterworks system or wastewater system is the person or entity that is given responsibility by the owner for the day-to-day operations of the drinking water system, and wastewater system and the systems management, maintenance or alteration. A municipality may take on this role through its own staff or it may choose to contract it out to a third party.

Your Duty and Liability

The legal duty has been written into the drinking water and wastewater legislation. These duties extend a legal responsibility to people responsible for the municipal waterworks and wastewater systems. Section 149 of the EPEA establishes a legal duty upon all persons responsible for the waterworks system. It requires that they ensure the drinking water supplied by the system does not contain a harmful concentration of substances. Section 3 of the *Wastewater and Storm Drainage Regulation* creates a more general duty for all persons responsible for the public wastewater system – to comply with the provisions of the regulation. In both situations, a failure to fulfill this duty may result in financial penalties for the municipality and its councillors.

Meeting your legal duty

Meeting this legal duty is the responsibility of:

- The owner of the waterworks or wastewater system;
- The operator of the waterworks or wastewater system;
- The system's approval or registration holder;
- A local authority that contracts to obtain water from the waterworks system;
- A local authority that grants a franchise to supply water from the system;

- A local authority that contracts to discharge wastewater to the wastewater system;
- A local authority that grants a franchise for the treatment and disposal of wastewater from the wastewater system; and
- Any person who acts as the principle or agent for one of the above persons.

It is important that members of municipal council, municipal officials, and council committee members who have influence, decision making authority, or control over the waterworks or wastewater system understand that, in addition to the municipality's liability, they can be held personally liable, even if the system is operated by a corporate entity other than the municipality. Section 233(1) of EPEA specifically notes that where the individual knew or ought to reasonably have known of the circumstances surrounding the failure to satisfy the legal duty, and had the power to influence or control to prevent this failure, then they personally may be found guilty of the offence.

Since Alberta municipalities manage and govern their public waterworks and wastewater systems in a variety of ways, the people who are subject to the legal duty within their corporation will also vary across the province and would depend on specific facts related to individual situations.

Complete wording of Sections 220 and 229, Environmental Protection and Enhancement Act 2000

220. No action for damages may be commenced against

- (a) a person who is an employee or agent of or is under contract to the Government,
- (b) a person who is designated as an inspector, investigator or analyst under section 25(3)(b), (c) or (d),
- (c) a person who is an employee of the Government, a Government agency, a local authority or the Government of Canada or any agency of that Government, where there has been a delegation under section 17,
- (d) a person who is an employee or agent of, or is under contract to, the Government, a Government agency or a local authority, where there has been a transfer of administration under section 18,
- (e) a member of the Environmental Appeals Board, or
- (f) a member, employee or agent of, or a person under contract to, a delegated authority referred to in section 37(d),

for anything done or not done by that person in good faith while carrying out that person's duties or exercising that person's powers under the Act including, without limitation, any failure to do something when that person has discretionary authority to do something but does not do it.

229. No person shall be convicted of an offence under section 61, 67, 76, 79, 88, 108(2), 109(2), 110(1) or (2), 111, 112, 137, 148, 149, 155, 157, 163, 169, 170, 173, 176, 188, 191, 192, 209, 227(b), (c), (e), (g) or (i) or 251 if that person establishes on a balance of probabilities that the person took all reasonable steps to prevent its commission.

Complete wording of Section 11, Wastewater and Storm Drainage Regulation (A. Reg. 119/1993)

11. No person shall be convicted of an offence under this Regulation if that person establishes on a balance of probabilities that he took all reasonable steps to prevent its commission.

Note: For a copy of the Environmental Protection and Enhancement Act, 2000 and its related regulations, go to Alberta Queen's Printer website at **www.qp.alberta.ca**

Maintaining an Appropriate Level of Care

Standard of care is a well-known concept in Canadian legislation and common law. The term refers to the level of care and attention that one person owes to another when they are in a legal relationship. The behaviour required to satisfy the standard of care will vary depending on the circumstances of the relationship, the nature of the activity, and the level of supervision one has over the activity.

There is no clearly defined standard of care within the legislation governing the distribution, treatment, and storage of potable water and collection, treatment, and disposal of wastewater. However, we can deduce an appropriate level of care based on two defences from liability found in sections 220 and 229 of the *Environmental Protection and Enhancement Act* (EPEA) and section 11 of the *Wastewater and Storm Drainage Regulation*.

You are not expected to be an expert in the areas of potable waterworks and wastewater systems. Section 220 implies that one must act, or not act, in good faith while carrying out that person's duties to be safe from liability. This provision could, for example, allow a person to rely on a report created by an engineer, lawyer, accountant or other professional person when making a decision without suffering legal liability.

Additionally, section 229 and section 11 state that conviction can be avoided where a person shows that they took all reasonable steps to prevent the offence from occurring. We can assume from this provision that all persons responsible for the waterworks and/or wastewater systems are expected to act reasonably within their powers and to take all steps necessary to ensure they fulfill their duty.

Enforcing the Legal Duty

As a municipal councillor, you need to be aware that not meeting your legal duty can result in serious consequences both for the municipality and you as an individual. Section 233(1) of the EPEA provides for individual liability of public officials for an offence committed under the Act.

Pursuant to section 228(2) a person who fails to meet their duty to ensure safe drinking water may be liable for a penalty of up to \$50 000. In the case of a corporation, including a municipality the maximum penalty is \$500 000. Additionally, section 234 allows for the court to impose a variety of other penalties based on the nature of the offence and the circumstances surrounding its commission. These penalties include:

- Prohibiting the offender from doing anything that could result in recidivism;
- Publishing, at the offender's cost, the facts related to the offence;
- Requiring the offender to pay a discretionary amount of money to the court;
- Directing the offender to pay the Minister for the costs associated with remedial or preventative action carried out by the Province;
- Ordering the offender to perform community service, or
- Requiring compliance with any other condition at the discretion of the court

Section 10 of the *Wastewater and Storm Drainage Regulation* creates a similar offence for any person who contravenes various sections of the Regulation. Here, an offence carries with it a fine of no more than \$50,000 for individuals and no more than \$500,000 for corporations.

If the municipality and its councillors are found guilty of an offence under the EPEA and its regulations, they may also be held liable for damages in civil court if such action is taken by those individuals who suffered as a result of municipal actions or decisions.

North Battleford: Council Decisions with Serious Consequences

In Spring 2001, nearly 6000 residents of this Saskatchewan city of 13 000 fell victim to an outbreak of cryptosporidiosis, an illness caused by a parasite in human and animal waste, which entered the local drinking water supply. Symptoms included diarrhea, abdominal cramps, fever, nausea, and headaches.

In an article on the subsequent Commission of Inquiry, the Canadian Environmental Law Association noted:

...what became clear was that the people of North Battleford were let down. Their municipality, carrying a bulging contingency fund, refused to spend money on upgrading their decrepit water treatment plant. Their provincial government, although aware the plant was in poor condition, hadn't inspected it in the ten years prior to the outbreak... plant employees, who had been working without a supervisor for over four months, were unable to heed the warning signs of a potential drinking water problem.

The City of North Battleford subsequently faced class action lawsuits totalling millions of dollars. The first settlement was an out of court agreement awarding \$3.2 million to some 700 claimants.

Wastewater Spill Leads to Charges and Fines for the City of Toronto

In the winter of 2006, a wastewater treatment facility operated by the City of Toronto bypassed partially treated sewage due to heavy rainfall in the area – an action permitted by their Certificate of Approval. Once the rain had subsided, staff operating the facility were instructed to close the bypass gate. However, due to a malfunctioning gate valve and flow measuring device, the gate did not close and the malady was not discovered for three and a half days – allowing only partially treated sewage to be discharged into lake Ontario. Luckily, there were no adverse effects to human health.

The City was fined \$150,000 plus additional surcharges for the offence. The incident and fine could have been prevented had the facility conducted regular physical and operational inspections for the hardware in the facility.

Actions You Can Take To Be Better Informed

The following are some suggested action you can take to be better informed about your drinking water and wastewater oversight responsibilities. Look for more of these suggested action boxes in section 3 of this guide. A summary list of all actions found in the guide has been complied for your convenience on page 45

- Become familiar with your municipal waterworks and wastewater system. Ask for a
 presentation to be given to council and/or arrange a tour of your water facilities.
 Specifically review and understand the approval or registration for your waterworks and
 wastewater systems to know the operating, monitoring and reporting requirements for
 your facilities;
- Become further acquainted with drinking water and wastewater legislation and regulations, available on the Government of Alberta Queen's Printer website at www.qp.alberta.ca. Search or browse current laws to find what you are looking for. To search, enter the title, or any part of the title, of the law you wish to find (for example, "Environmental Protection and Enhancement Act", "Water Act", or "Wastewater and Storm Drainage Regulation"). If you don't know any part of the title of the law, enter a word or phrase that you think might be in the text of the law; and
- Learn about water safety and its link to public health. Speak to the waterworks and wastewater system operators, regulators and public health staff to learn more.

Some Questions and Answers on the EPEA Legal Duty to Ensure Water Safety

If operations are contracted out, am I still responsible to fulfill the legal duty?

As an owner or local authority for the waterworks and/or wastewater system you remain responsible for satisfying the legal duty even though you have contracted out operations to an operating authority. However, your degree of responsibility may be diminished depending on the circumstances and the relationship between you and the operators.

If something goes wrong, will I be held responsible?

The duty of care related to drinking water and wastewater is designed to ensure that decision-makers are doing their due diligence to protect public health. The circumstances and your actions — what you do or don't do, what questions you ask, what steps are taken to address the risks or problems with your waterworks and wastewater system — will all be important in determining whether you fulfilled your legal duty and if you should be held responsible.

What can happen to someone who breaches the statutory duty of care?

The duty of care is all about ensuring responsible actions are taken to protect human health and the environment. Given the seriousness of this duty to your community, those whose actions fall below the appropriate level of care fail to protect the public, and cause harm to human health or the environment could face significant penalties including fines and other discretionary court orders. Additionally, if found guilty of an offence under EPEA, you may be party to a civil action brought on by those injured by your actions. This action could result in the payment of significant compensatory and punitive damages.

Who determines if the duty of care has been breached?

When an incident occurs that may constitute a breach of the statutory duty of care, Alberta Environment and Water or the Alberta Utilities Commission will initiate a response that may include an investigation and gathering of evidence to determine if charges should be laid. In a case where charges are laid, it is up to the courts to determine if an offence has been committed and if penalties, court orders, or fines will be imposed. This procedure is followed in any potentially serious breach of Alberta Environment and Water statutes.



Check Your Knowledge

Ask yourself these questions to check your current level of knowledge about your waterworks and wastewater systems and oversight responsibilities.

Ц	 Have I had a tour of our drinking water and wastewater facilities? Am I familiar with our municipal waterworks and wastewater systems including: 			water sources, water facilities and	
				infrastructure? What are the plans to address these risks?	
				Am I aware of the risks of discharging treated wastewater to the receiving	
	1.	the water source?		environment and potential impact if the	
	2.	where the treated wastewater is discharge to and downstream water users?		system does not operate in accordance with the approval or registration? What are the plans to address these risks	
	3.	the physical condition of major infrastructure?		If there is an emergency with the waterworks or wastewater system, what procedures are followed? How will I be	
	4.	the condition of the monitoring		notified? How will the public be notified?	
		equipment and how well they are maintained.		Am I aware of the municipal role in source protection planning?	
	5.	the background and experience of senior staff?, and		How and when do I ask for annual/monthly reports on the drinking water and	
	6.	the elements of the approvals that have been granted for ownership		wastewater system from senior management?	
		and operation of the facilities?		What should I look for in the	
	Am I acquainted with the legislation and regulations?			annual/monthly report? What questions must it answer?	
	Do I know basic information about water safety and the operation of water facilities?			What should I do if a report identifies declining water quality?	
	Do I understand the different roles and responsibilities of those who have decision-making authority – municipal councillors, senior management, and other municipal officers?			Do I know if appropriate steps are being taken to resolve any issues? Do I know when outside expertise is needed?	
				Are our water systems periodically audited? When? How often? What should I do when I receive audit results for consideration?	

□ Am I assured that competent senior management has been hired? Do they conduct regular performance appraisals waterworks and wastewater of staff?
 □ Do I know if our waterworks and wastewater systems are financially sustainable for the future? Are there financial plans in place?
 □ What were the results of our last

inspection? Are there areas for

improvement?

If you can't answer any of these questions, review them with municipal staff.



What Should I Be Asking?

When decisions come before your council relating to drinking water or wastewater, you want to understand the impacts on your community and public health. While every situation will be different, the following are some preliminary questions you might want to ask:

	What are the risks to public health or the health of the environment as the case may be?		How will this decision impact our community's demand for water or surge o wastewater?
	Are there any areas of risk that council needs to address?		How are we managing our water infrastructure? Is our infrastructure
	What checks and balances are in place to		sustainable for future generations?
	ensure the continued safety of our water and the protection of the environment where the treated effluent is discharged to?		Are there any emerging issues related to our drinking water or wastewater that council should be aware of?
	Are we meeting our legislative and regulatory requirements?		What is the emergency management plan for a negative water or wastewater event? What is the role of council in such
	What is the public health impact or impact		emergencies?
	on the environment and the long-term cost of deferring this decision?		Is there a Drinking Water Safety Plan in place? Is it current?
J	Will this decision affect our water sources or impact down stream water users?		Has water and wastewater operations staff taken required training and upgrading?

Be informed. Ask questions. Get answers. It's your duty.

Overview of Water and Wastewater Management Topics

Organizational and Governance Models

Many different management and operating models are available for municipal consideration. Currently, most waterworks and wastewater systems in Alberta are owned by municipalities. These municipal facilities include water treatment plants, water distribution systems, and wastewater collection and treatment systems that serve cities, towns, hamlets, villages, special areas, and Métis settlements.

These systems are often operated by municipal departments or subsidiaries with oversight provided directly by municipal councillors. On the other hand, some municipalities choose to hire external contractors to operate their waterworks and/or wastewater systems. In such instances, these contracts must be approved by the Alberta Utilities Commission, who will then exercise general supervision over the operation and ownership of the waterworks system.

Conversely, waterworks and wastewater systems may be owned and operated privately. These are known as privately owned facilities and can include surface and groundwater treatment plants, water distribution systems, wastewater treatment plants, and wastewater collection systems serving the following types of developments:

- Industrial facilities:
- Provincial parks;
- Institutional/government facilities;
- Recreation developments;
- Homeowner/condo associations;
- · Subdivisions; and
- Water co-ops

Lastly, water treatment and wastewater treatment facilities may be owned and operated by a regional commission. These ad hoc creations are established as corporations under the *Municipal Government Act*. The commission provides services across municipal boundaries, and are governed by boards representing their municipal members. Typically, these commissions treat the water and wastewater, which is then distributed or collected by the municipalities. These distribution/collection systems may be owned or operated by the municipality or as a public facility.

Waterworks and Wastewater System Approvals and Registrations: Tools That Can Help You

In Alberta, all public waterworks and wastewater systems must be approved by Alberta Environment & Sustainable Resource Development. The approval and registration process requires owners and operators to incorporate the concepts of quality management into system operation and management.

Under the EPEA, the Approvals and Registration Procedure Regulation outlines the steps to be followed to acquire an approval or registration for a waterworks or wastewater facility. This regulation, along with the Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage Systems, provide the explicit performance and design standards required for approval under the Act. For drinking water and wastewater systems to receive approval, the owner must have in place:

- An accepted operational plan (see next section for more details);
- A Water Act license to divert water;
- An emergency response plan (see next section for more details);
- A map/plan for the area where development is to take place;
- A list of operating staff responsible for the day-to-day operation of the system with the appropriate certification;
- All necessary technical data; and
- A list of accredited laboratories to be used for the water analysis and the frequency of analysis (for renewed approvals only)

Registrations are used in lieu of an approval for activities that are uniform across Alberta. The province-wide conditions for these activities are stipulated in various codes of practice, for example the Code of Practice for Waterworks Systems Using High Quality Ground Water, the Code of Practice for a Waterworks System Consisting Solely of a Water Distribution System, and the Code of Practice for Wastewater Systems Using a Wastewater Lagoon.

Be Better Informed

More information regarding the approval process and all necessary forms are available on Alberta Environment and Sustainable Resource Development's website at http://environment.alberta.ca/01158.html

The Operational Plan and You – Setting an Overall Policy

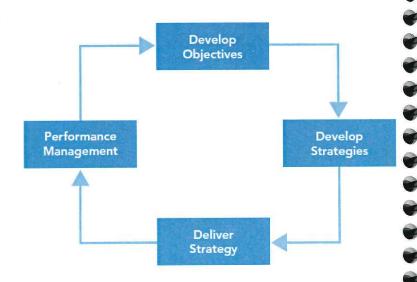
The operational plan sets out a framework for routine operation procedures and monitoring and analysis procedures relevant to the waterworks and wastewater systems. This is the backbone of the management system and should be known by both the owners and operators of the system.

The operational plan includes:

- Basic key information about the waterworks and wastewater system owned by your municipality;
- A description of the organizational structures (roles, responsibility, authority, certification);
- Operating instructions for the facility;
- Performance requirements;
- General maintenance schedule and instructions; and
- A procedure for sampling, testing, and monitoring the safety of the facilities drinking water and wastewater.

Results-Based System

A results-based framework should be used as a standard for operational plans and other approval requirements concerning waterworks and wastewater systems. Running the framework involves developing the objectives, developing strategies to achieve the objectives, carrying out the strategies, assessing performance and adjusting actions where actual or projected results are not what are desired. This methodology will align the waterworks and wastewater systems with the province's commitment to cumulative effects management and will assist owners and operators to develop sound operational procedures and controls.



Developing the objectives typically involves specifying policies and procedures that form the basis of the operational plans, while **developing strategies** involves planning for how the policies and procedures are to be implemented. **Carrying out the strategies** is the day-to-day operation of the facilities, including any emergency procedures. Finally, **assessing performance and adjusting actions** are reflected in the audits and reviews conducted by Alberta Environment & Sustainable Resource Development and the facility owners and operators.

Actions You Can Take To Be Better Informed:

- Ask your operating authority to speak to municipal council about your operational plan and emergency response plan;
- Consider and act on any advice (including deficiencies and action items) identified during the review process and annual report;
- Review the policies and commitments developed concerning the operational plan and emergency response plan; and
- Ask your operating authority to show how it is meeting these policy commitments.

Managing the Risks to Drinking Water and Wastewater

Under the Standards and Guidelines for Municipal Waterworks, Wastewater, and Storm Drainage Systems, municipalities, system owners, and operators must undertake a risk assessment of their facility once every five years. This risk assessment is to be preformed by an independent third party approved by the Regional Director. These assessments are important in ensuring that vulnerabilities in the system are identified and assuring the public that actions are being taken to reduce any potential risks to the quality and safety of their water. By performing a risk assessment, your operating authority will assess:

- Existing or potential hazardous events facing your water and wastewater systems, for example rail car derailment, algal blooms, water main breaks, problems with wastewater collection system or the pumping stations, etc;
- The impacts on water if a hazardous event occurs, for example chemical contamination
 of source water/treated water, biological contamination of source water/treated water,
 possible biological/chemical contamination due to loss of supply/low pressure, etc.;
- The necessary measures or response measures for each hazardous event (these
 measures may already be in place through such barriers as source protection or
 treatment processes), and
- Ranking each event according to its likelihood of occurring and the consequences or severity of the results

In some cases, the operating authority may identify measures to address hazardous events which will call for improvements that require long-term planning. These types of decisions will often involve council approval. As a councillor, you should take time to understand the underlying risks associated with these decisions, their potential likelihood and impacts to public health and safety and the health of the environment.

More on Hazardous Events and Hazards to Drinking Water and Wastewater

Hazardous events can originate from natural events, technological events, or human activities. Natural events include floods, ice storms, drought, and spring run-off. Technological events could include equipment failure or power outage. Human activities that could lead to water quality risks include vandalism, terrorism, chemical spills, and construction accidents.

The four types of hazards that may affect water are biological, chemical, physical, and radiological:

Biological Hazards:

- Include bacterial, viral, and parasitic organisms like E. coli, Giardia, and Cryptosporidium;
- Are considered the most significant risk to human health because effects are acute and can cause illness within hours;
- Are commonly associated with fecal wastes from humans or animals, or they may occur naturally in the environment; and
- Not adequate removal of biological organisms from the wastewater can adversely impact the receiving environment.

Chemical Hazards

- Include toxic spills, heavy metals, dissolved gases (radon, pesticides, nitrates, sodium, and lead);
- Can come from source water or occur in the treatment and distribution system; and
- Wastewater treatment plants are more part biological process and can easily be upset by presents of adverse chemicals in the wastewater.

Physical Hazards

- Include sediments that can carry microbiological hazards and interfere with the disinfection process, biofilms, and pipe material;
- Can result from contamination and/or poor procedures at different points in the delivery of water to the consumer; and
- Not adequate removal of suspended solids from the wastewater can adversely impact the receiving environment.

Radiological Hazards

- Are naturally occurring chemicals such as radon or uranium, which occur most frequently in groundwater; and
- May arise from man-made or natural sources.

In other cases, the operating authority may identify risks that are outside of their control. For these, it may be appropriate to consult your emergency response plans.

Drinking Water Safety Plan

What is a Drinking Water Safety Plan? A Drinking Water Safety Plan (DWSP) represents a system-wide approach to ensuring that the quality of water delivered to consumers is of good and consistent quality. To do this it is necessary to consider the source of the water, how it is treated, and the storage and distribution of the treated water. A DWSP is based on a

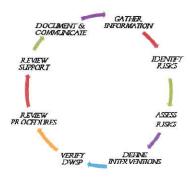
comprehensive assessment of risk factors that could adversely affect the quality of the water delivered to consumers, and sets out how risk factors are to be monitored and managed.

The compilation of an effective Drinking Water Safety Plan is dependent on four principal processes:

- Collecting and collating the best information that you can about your water supply system;
- Analysing and understanding the risks that are present and that in certain circumstances will threaten the safety of your customers;
- Assessing correctly what you need to do in order to reduce these risks to an acceptable level; and
- Determining how you will obtain the necessary resources to do this, how you will prioritise
 and audit the tasks that you have identified, and how you will deliver the actions within the
 required timescale.

There are three other important considerations:

- A DWSP cannot work in isolation so you must communicate and discuss your findings with the main stakeholders and other relevant parties;
- For the DWSP to work the actions that you have identified as necessary to mitigate the risks must be implemented; and
- Finally, the DWSP is a 'living document' and should not just sit on the shelf as if to say 'job done', it should be reviewed regularly and updated when necessary.



The Drinking Water Safety Plan Cycle

Where do I get more information?

Alberta Environment & Sustainable Resource Development has set up a web-page www.environment.alberta.ca/apps/regulateddwq/dwsp.aspx which contains all the necessary documentation including guidance. It also contains web-links to other sources of useful information about DWSPs. There is also an email address (aenv.dwsp@gov.ab.ca) where you can send any additional questions.

Emergency Response Planning

Emergency response plans outline the system owner's responsibilities during emergency situations. They are required to be filed with the operational plan during the approval process with, Alberta Environment & Sustainable Resource Development, Alberta Public Safety Services, the local authority, and the municipality. As a municipal councillor, it is your responsibility to understand council's role in emergency situations.

Definitions - A **drinking water** or **wastewater emergency** is a situation or service interruption that may result in the loss of the ability to maintain a safe supply of water or adequate wastewater services to the community.

Emergency preparedness means identifying what could happen in your system to cause an emergency and having processes and procedures in place to prepare for and respond to those emergencies. An emergency plan includes the procedure to be followed in the event of major problems with the waterworks or wastewater systems such as:

- Laboratory results exceeding the prescribed limits;
- Chemical overfeed/underfeed;
- Raw water shortage;
- Raw water quality problems;
- Problems with the wastewater collection system;
- Facility failures;
- Natural disasters/criminal acts; and
- Distribution/collection system break or repair.

A plan should also include a list of contacts at Alberta Environment & Sustainable Resource Development, Alberta Health, Regional Health Authorities, Fire Department, Disaster Coordinator, and other necessary agencies.

In accordance with the Standards and Guidelines for Municipal Waterworks, Wastewater, and Storm Drainage Systems (Section 2.7.2)., these emergency plans should be reviewed and updated annually to ensure that contact information remains the same, resource availability is available, and the site specific vulnerabilities remain consistent.

These plans should be tested on a regular basis to ensure their appropriateness and deliverability. The tests should be documented and include lessons learned and plan recommendations.

In the drinking water and wastewater context, emergencies can happen as the result of a variety of natural and human-caused events such as severe weather, major power outages, spills, pandemics, and deliberate acts of vandalism or terrorism. Potential emergencies can be identified during the creation of the emergency plan and updated based on the results of a risk assessment, Alberta Environment & Sustainable Resource Development inspections, voluntary environmental audits, and records of past emergencies.

Actions You Can Take To Be Better Informed

- Ask your operating authority to review the emergency plan with council and to explain what responsibilities have been assigned to the owner.
- Know who will be the spokesperson during an emergency
- Ensure critical staff have taken necessary training on emergency procedures and have participated in testing
- Learn about provincial communication and action protocol for failed bacterial results on Alberta Environment and Water's website at http://environment.gov.ab.ca/info/library/7827.pdf
- Become familiar with the province's action protocol for chemical exceedances in drinking water on Alberta Environment and Water's website at http://environment.gov.ab.ca/info/library/8189.pdf
- Learn about the Alberta Emergency Management Agency and the Alberta Emergency Plan. Information can be found at: http://www.aema.alberta.ca/ps_alberta_emergency_plan.cfm

Alberta Emergency Management Agency has developed the *Alberta Emergency Plan*. This plan expands past the water and/or wastewater emergency situations. Responsibilities of the local authority or authorities are outlined in section 3.3.2. of the Alberta Emergency Plan

Part of the emergency plan should clearly document the roles and responsibilities of the owner and operating authority during each emergency and how communication between all involved is to be established. Planning beforehand how those in charge will talk to each other and the media can avoid complications during an emergency.

Emergency preparedness also means training and testing. The best emergency response procedures are ineffective if personnel are not properly trained on what to do and the procedures properly tested. All personnel working within the drinking water system and wastewater system need to know what to do in an emergency, especially those assigned special response roles. Common forms of testing and training include orientation and education sessions, table-top exercises, walk-through drills, functional drills, or full-scale exercises.

Public Health Intervention: Boil Water Advisory and No-Drinking Water Advisory – How Are They Different?

When a drinking water standard has been exceeded or a problem has arisen with the drinking water system, Alberta Health Services in collaboration with Alberta Environment & Sustainable Resource Development and the system owner/operator will decide to take some form of corrective action. These situations do not in themselves indicate that the drinking water is unsafe, but rather that an incident has occurred and action must be taken to protect the public. In some cases, these corrective actions may include boil water advisories (BWA) or no-drinking water advisories (NDWA).

An executive officer with Alberta Health Services is responsible for issuing BWAs and NDWAs where they deem it appropriate in the interest of safe-guarding the public's health.

A BWA is issued when a condition exists with the drinking water supply that may result in a health risk, and where the condition may be corrected by boiling the water. An example is the presence of bacteria in the water supply such as E. coli. BWAs are intended as temporary measures to allow for remedial work within the waterworks system, and are not intended to be used as an on-going method of treatment.

A NDWA is issued when a condition exists with the drinking water supply that cannot be corrected by boiling the water. This is often the case where toxic chemicals are present in the water supply or there is a total infrastructure failure, which is often the result of a natural disaster. In these situations, Alberta Health Services will take actions to ensure that a safe and adequate supply of water is available for essential services such as emergency centres and hospitals.

In both cases the executive officer for Alberta Health Services will direct the system owner to inform users of the order/advisory, through means such as door-to-door notification, public posting of notices, and local media outlets, to boil water or to use an alternate water supply until further notice. An order/advisory will be lifted only after the executive officer is satisfied that corrective actions were taken and the situation has been remedied.

Wastewater Spills, Unauthorized Discharges, and Overflows

When a wastewater system experiences unauthorized discharges, (either effluent quality does not meet the requirement or the discharge period is not in accordance with approval or registration) accidental spills, or overflows from a treatment facility or collection system the owner and operator of the system are required to take certain measures to ensure that notification is made and remedial action takes place.

As per sections 110 to 112 of the EPEA, the person who caused or permitted the release of an unauthorized substance into the environment is required to contact Alberta Environment & Sustainable Resource Development immediately by telephone and provide a written report that includes:

- Location and time of the release;
- A description of the location and the surrounding area;
- A description of the circumstances leading to the release;
- The type and quantity of the substance released; and
- Details of any actions taken or proposed to be taken to rectify the situation

Once Alberta Environment & Sustainable Resource Development has been notified, the province may take action to safeguard public health. These actions may include closing beaches and waterfronts, issuing water advisories, informing downstream water users, and requiring additional testing at nearby drinking water treatment facilities.

In addition to notification, the persons responsible for the wastewater spill, discharge, or overflow is required to take measures to:

- Repair, remedy and confine the effects of the substance;
- Remediate, manage, or remove the substance so as to prevent further adverse effects;
 and;
- Restore the environment to a condition that satisfies Alberta Environment & Sustainable Resource Development

Infrastructure Planning

Having sound drinking water and wastewater infrastructure is necessary to meet the demand for safe, high quality water. The machinery, equipment, and structures used to produce and provide drinking water and treat wastewater must be in place, maintained and improved when necessary pursuant to section 532(1) of the *Municipal Government Act*.

As part of the operations plan, the operating authority is required to:

- Develop a general maintenance schedule for the facility within its design capacity;
- Outline maintenance instructions for facility equipment; and
- Establish a schedule and procedure for the cleaning and flushing of the water distribution system – including water storage reservoirs and wastewater collection systems

It is expected that you, as a municipal councillor, know and understand these maintenance schedules and procedures and other conditions of approval. Decisions made by you or your fellow councillors that do not comply with the operations plan could negatively impact the quality of your municipal waterworks and wastewater systems and leave you and the municipality open to liability.

Actions You Can Take To Be Better Informed

- Find out what maintenance, rehabilitation, and renewal plans are in place for your drinking water system and wastewater systems.
- Ask your operating authority to present the findings of any infrastructure reviews they undertake.

Maintenance activities can be either planned or unplanned:

- Planned maintenance activities include scheduled or proactive activities needed to maintain or improve infrastructure elements. For example: equipment maintenance, main replacements, etc. They are done to reduce the risk of an unplanned failure; and
- Unplanned maintenance includes reactive activities, for example: actions to deal with main breaks, pump failures, etc. They can draw heavily on resources and adversely
 affect water quality.

By establishing planned programs for maintenance, rehabilitation, and renewal, the operating authority can save time and costs and increase public confidence in the waterworks and wastewater systems.

Scope of Assets

It was estimated, in a 2004 report, that Alberta required \$590 million in water infrastructure repairs and upgrades for a 10 year plan, and \$884 million for a plan that extended 25 years. Water efficiency measures were cited as a means of extending the capacity of existing infrastructure and deferring upgrading costs.

Definitions:

Infrastructure – the set of interconnected structural elements that provide the framework for supporting the operation of the waterworks or wastewater system, including buildings, workspaces, process equipment, hardware and software, and supporting services such as transport and communications.

Rehabilitation – the process of repairing or refurbishing an infrastructure element.

Renewal – the process of replacing an infrastructure element with new elements.

Sustainable Financial Planning for Waterworks and Wastewater Systems

Achieving financial sustainability in Alberta's municipal water and wastewater is a long-term goal. Financial sustainability is needed to ensure that Albertans continue to enjoy clean and safe drinking water, water and wastewater, reliable services, and environmental vibrancy.

To help municipalities reach financial sustainability, Alberta Environment & Sustainable Resource Development has developed a Full Cost Accounting (FCA) initiative to promote fiscal planning by those who own and operate municipal waterworks systems.

Based on the principles of Environment Canada's *National Action Plan to Encourage Municipal Water Use Efficiency*, FCA was developed as a method of accounting to capture all costs related to providing drinking water services: operating and maintenance expenses, depreciation of assets, and returns for the replacement of capital assets. As waterworks systems age, investments are required to renew and expand existing infrastructure. If these costs are not built into municipal infrastructure budgets, the upgrading and maintenance necessary for the effective operation of the waterworks system could easily be deferred and/or ignored. This FCA is transferrable to wastewater systems.

By utilizing the FCA tools, you ensure that your waterworks system receives sufficient funds for the operation of the facility, maintenance of the infrastructure, treatment and distribution of safe potable water, and continued financial integrity of the system.

There are two recognised methods involved in the performance of Full Cost Accounting: the **utility approach** and the **cash needs approach**. Though each method ultimately leads to financial sustainability, the utility approach is the method recommended by Alberta Environment & Sustainable Resource Development.

The following are some key principles of the utility approach to FCA:

- Responsible reporting of all operating costs, capital asset depreciation, interest expenses, and any returns/dividends that the system is required to provide;
- Life-cycle planning as an approach to managing drinking water and wastewater assets;
- Owners of the waterworks and wastewater systems are provided with an understanding of the costs of the facility's various activities; and
- More transparency is created as the information gathered is used to inform consumers on the costs associated with treating and distributing water and collecting and treating wastewater.

Actions You Can Take To Be Better Informed

To learn more about Alberta Environment and Sustainable Resource Development's Full Cost Accounting initiative and how you can register your municipality, visit the official website at http://www.environment.alberta.ca/01963.html

While full cost accounting reports are expected to be filed annually, the owner and operator of a waterworks or wastewater system is encouraged to develop financial plans that are designed to forecast costs for the entire life of the infrastructure/water assets. These plans are, however, living documents that, as best practice, are updated frequently based on the information contained in the FCA reports.

As a municipal councillor, you have an important role to play in ensuring that appropriate resources are made available for financial planning and/or full cost accounting. Municipal councils have the ultimate responsibility for approving financial plans for their municipal wastewater and waterworks systems.

A sustainable system is one that can adequately cover current operating costs, maintain that repair its existing asset base, replace assets when appropriate, fund future growth and enhancements to services, and account for inflation and changes in technology.

System Audits: Creating Efficiencies and Accounting for Water Loss

An important tool in understanding the condition of your drinking water system infrastructure/assets is a voluntary environmental audit. In their *Compliance Assurance* policy, Alberta Environment and Sustainable Resource Development has highlighted the importance of auditing in the promotion of sustainable, efficient, and compliant systems that operate beyond the regulated standards.

A voluntary environmental audit represents a systematic, documented, proactive and objective evaluation of your facility with the intention of:

- Determining environmental risks associated with the operation and related practices;
- Assessing compliance with the regulatory requirements; and
- Assessing the facility's performance and effectiveness against an environmental management system or standard of practice.

One component of an audit of a waterworks or wastewater system will involve estimating where all the water entering the system ends up. This process will reveal how much water is being lost to leaks for water mains and service connections. Leaks are a concern as they can:

- Signal deteriorating water main conditions and be a precursor to more breakages;
- Be a source of bacterial contamination;
- Result in additional costs for pumping and treating water that is not ultimately delivered to customers; and
- Damage other infrastructure such as roads and sewers.

The Big Picture

According the Environment Canada, 7.2 per cent of water produced at municipal water treatment facilities in Alberta is lost, mainly due to leaks in the distribution system infrastructure. While this figure is down from the 9 per cent reported in 2004, it still represents a startling and yet, rectifiable statistic.

(Sources: Environment Canada, 2010, 2010 Municipal Water Use Report: 2006 Statistics; Environment Canada, 2004, 2004 Municipal Water Use Report: 2001 Statistics)

System Reports and Inspections: What they tell you about your waterworks and wastewater system

An owner of a waterworks or wastewater system is required to submit a summary report monthly and annually to the Regional Director and Alberta Environment & Sustainable Resource Development. Annual summary reports must be produced by February 28 of each year to cover the preceding calendar year and must be retained by the municipality for the life of the waterworks or wastewater system.

A monthly summary report must include at a minimum:

- The names and phone numbers of all operators of the facility and manufacturers of the treatment chemicals used during the month;
- The results of all the monitoring parameters required by the approval or code of practice;
- The locations of all the sampling done over the course of the month; and
- The results of all other required measurements conducted over the month.

The annual summary report must contain the following information:

- A summary of the monthly reports;
- The results of any other compliance monitoring not included in the monthly report; and
- A description of any problems the facility experienced and the corrective actions taken to rectify these problems.

Every public waterworks and wastewater facility is inspected by Alberta Environment & Sustainable Resource Development. The frequency of these inspections is dependant on the nature of the facility's water supply or effluent destination. At a minimum, those facilities which use surface water as their source are inspected annually, whereas those that use a high quality groundwater source are inspected every two years. Similarly wastewater systems that discharge continuously into the receiving environment such as mechanical wastewater treatment facilities are inspected more frequently than wastewater stabilization ponds that discharge seasonally.

For waterworks systems, regardless of source, an inspection will include a review of the system's source, treatment, and distribution components, as well as water quality monitoring procedures and practices to evaluate the system's management and operations. Inspectors will identify areas of non-compliance or improvement, and any actions that can or must be taken to correct them.

For wastewater systems an inspection will include a review of the collection system including types of wastewater discharged to the system, treatment process, and wastewater quality monitoring procedures and practices to evaluate the system's management and operations. Inspectors will identify areas of non-compliance or improvement, and any actions that can or must be taken to correct them.

Following the inspection, a variety of steps may be taken. If Alberta Environment & Sustainable Resource Development highlights any area of non-compliance that may adversely impact human health, an authority from Alberta Health Services is notified immediately. Other departments may be referred to depending on the nature of the identified issue. For example, if the inspector identifies an opportunity for a facility to optimize its performance an Alberta Environment & Sustainable Resource Development Drinking Water Operation Specialist may be asked to offer their assistance. If Alberta Environment & Sustainable Resource Development highlights any area of non-compliance with the wastewater system that may adversely impact human health or the health of the environment, the department will instruct the municipality to take corrective action and other departments may also be referred to depending on the nature of the

identified issue such as Environment Canada in the case of potential impact on fish bearing stream.

Waterworks and Wastewater Systems Operators: What do they do? What certification requirements must they meet?

Under the EPEA each municipal waterworks and wastewater system is required to have certified operators supervising and/or carrying out the day-to-day operations for the facility. The approval, registration, or code of practice for each facility specifies the certified operator requirements for each system.

How the Pieces Fit Together

To learn more about the Water & Wastewater Operator Certification Program, read the Water and Wastewater Operators' Certification Guidelines at http://environment.alberta.ca/documents/Water_Certification_Guidelines.pdf or visit the Water and Wastewater Operator Certification website at: http://environment.alberta.ca/01622.html

Facility Classification

The operational complexity of your waterworks or wastewater facility will determine what certification requirements your operators must have to operate the system. EPEA requires that the operation of a waterworks or wastewater facility be supervised by at least one person holding a certification matching the facility's classification number. The more complex a facility, the more certified operators will be required. For example, if your municipal waterworks system is classified as a Class II Water Treatment Plant, you are required to have a designated operator certified at Level II, Water Treatment. Any additional certification requirements will be found in the approval, registration, or code of practice.

Alberta Environment & Sustainable Resource Development reviews and classifies all waterworks and wastewater facilities on a scale from I to IV. The classification for Water Distribution and Wastewater Collection systems is based on the size of the population served by the facility, whereas the Water Treatment and Wastewater Treatment classifications are based on the degree of difficulty required to operate the facility.

The following is a summary of the facility classifications designated by Alberta Environment & Sustainable Resource Development:

Facility	Based Upon	CLASS I	CLASS II	CLASS III	CLASS IV
Water Distribution (WD)	Population	1500 or fewer	1501-15,000	15,000-50,000	50,001 or more
Water Treatment (WT)	Degree of difficulty		Based on the de	egree of difficulty	
Wastewater Collection (WWC)	Population	1500 or fewer	1501-15,000	15,000-50,000	50,001 or more
Wastewater Treatment (WWT)	Degree of difficulty		Based on the de	gree of difficulty	•

Certification Requirements and Responsibilities

"In my opinion, water and wastewater operators comprise many vital occupations. Although the occupations they perform are generally invisible and often misunderstood by the public, they are vital to each and every community.

~John Voyer, Executive Director, Alberta Water and Wastewater Operators Association.

Certified facility operators play a vital role in providing safe water for your community. The responsibilities of an operator may include, but are not limited to:

- Checking, adjusting, and operating equipment such as pumps, meters, analysers, and electrical systems, and having replacement parts on-site from critical repairs;
- Determining chemical dosages and keeping chemical feed equipment appropriately filled with chemicals, adjusted, and operating properly;
- Ordering and maintaining a stock of parts, chemicals, and supplies;
- Maintaining an operating records and submitting operating reports to the system's operating authority/owner and the province;
- Collecting and submitting water samples as required by regulation (this usually involves taking samples from a number of key locations and transporting them to a licensed laboratory); and
- Explaining and recommending to the operating authority/owner any major repairs, replacements, or improvements that should be made to the plant.

To qualify to write the certification exams applicants must meet the minimum education, training, and experience requirements associated with each certification level. Once the requirements have been met and the exam passed, the applicant will receive their three-year certificate from Alberta Environment & Sustainable Resource Development. To renew a certificate, an operator must obtain a minimum of 12 months operating experience during the certificate's validity, and obtain a minimum of 3.6 (0.6 for Small Systems) continuing education

credits (CEU) during the three-year certification period. Continuing education helps operators steadily improve their knowledge and skills throughout their careers.

Operators obtaining employment in Alberta, coming from other Canadian jurisdictions, that hold valid full certificates are on written application, issued Alberta Certification at a comparable level, without further examination. All the Canadian provinces are members of the Agreement on Internal Trade (AIT). More information on the AIT can be found at: http://www.ait-aci.ca/index_en.htm

The following is a summary of the education and experience requirements for each operator level:

OPERATOR LEVEL	REQUIREMENTS	WT	WD	wwt	wwc
Small Systems	Training (CEUs)	0.6 CEUs approved applicable training		0.6 CEUs approved applicable training	
	Experience	6 mo	nths	6 months	
	Education (years)	12	12	12	12
Level I	Experience (years)	1	1	1	1
	Training (CEUs)	1.2	1.2	1.2	1.2
Level II	Education (years)	12	12	12	12
	Experience (years)	3	3	3	3
	Education (years)	14	14	14	14
Level III	Experience (years)	4*	4*	4*	4*
Level IV	Education (years)	16	16	16	16
Leveriv	Experience (years)	4*	4*	4*	4*

^{* 2} years of the Experience must be in "direct responsible charge" of the facility or system

Actions You Can Take To Be Better Informed

As the facility's owner, you are responsible for being aware of the certified operator requirements for your facility and to ensure that the requirements are met. To meet this legal responsibility the following actions are recommended:

- Inform yourself with the contents of the facility's approval, registration, or code of practice
- Confirm that all minimum certified operators are on hand when required
- Develop or become aware of your facility's contingency plan to ensure that operator requirements are met in the case of planned absences, unplanned absences, or changes of staff. Ensure you have a certified operator succession plan in place.
- Ensure there are sufficient resources for the appropriate training and continuing education requirements to be allocated to the municipal staff involved the operation of the waterworks and wastewater facility.

Communicating With Your Operating Authority

Communication is an integral component for the successful ownership and operation of a waterworks and wastewater system. Taking action to develop communication strategies between municipal council and facility operators ensures vigilance in maintaining safe, high quality water within the municipality and protects the municipality from liability.

It is important for municipal councillors, to develop a procedure for communicating with the operators of your municipally owned waterworks or wastewater system. The procedure for communicating with the operators may be as simple as indicating the status of the various monthly and annual reports and the implementation and effectiveness of the operations plan during scheduled meetings, such as council meetings.

Communication procedures may also extend to involvement with the public. This level of communication can be done by posting information on a publicly accessible website or through billing inserts.

Actions You Can Take To Be Better Informed

- Discuss with your operating authority how and when communication will occur; and
- Find out what information can be made available to the public and the best way to distribute

Water Conservation

Many Albertans believe this province has an abundant supply of freshwater. However, water scarcity is already a reality in southern Alberta. As our demand for water grows, we must take measures to protect and conserve the quality and quantity of this resource. Not only will these measures help to sustain the resource and our environment, but ensuring that water is used efficiently will help cut costs for the municipality and its residents.

Creating and implementing water conservation measures helps to reduce water and energy consumption, lower long-term infrastructure costs, and reduce the costs associated with distributing, treating and storing water. It is estimated that every additional litre of water required by a municipality costs roughly four dollars for expanded water and wastewater infrastructure. Many municipalities in Alberta are realising significant savings from water conservation measures.

The cost of energy associated with pumping, distributing and treating water and wastewater is a significant expense for most Alberta municipalities. Saving water saves energy and reduces greenhouse gas emissions. Better water management has the potential to be one of the most cost-effective energy reduction strategies for Alberta's municipalities.

Water Conservation Facts

- Albertans currently use about 283 litres of water per capita per day. This is nearly twice as much as other countries with similar standards of living such as Germany, the United Kingdom, and the Netherlands;
- Pumping and distributing water to homes and businesses, and treating water and wastewater makes up one-third to one-half of a municipal government's total electrical use – more than double that of other municipal costs such as street lighting;
- Canadian surveys have consistently shown that as the percentage of metered homes
 in a community increases, water use per capita decreases. In municipalities that used
 volume-based water charges (i.e. metres), the average daily consumption is 263
 litres per person, while municipalities that charge a flat or assessed rate, the
 corresponding figure is 76 per cent higher or 464 litres per person; and
- Currently 84.8 per cent of residential clients in Alberta are metered.

(Source: Environment Canada, 2010, 210 Municipal Water Use Report: 2006 Statistics)

Conservation in Action

Water conservation does not require large scale projects to be effective. All Albertans have the capacity and interest to protect Alberta's water supply. A number of municipalities are taking action on conservation such as providing public information on their websites and incenting conservation through rebate programs. For example, towns like Peace River are creating water conservation incentives to encourage residents to conserve water. The town has established rebates for low-flush and dual-flush toilets as well as subsidized rain barrels, which, if used by all residents could conserve about 67 million litres of water per year. Another example is the City of Calgary. As of September 2011, the city implemented a rebate of \$50 for toilet replacement. To be eligible the new toilet must have a WaterSense TM label.



Learn More about Water

Sources and Destinations of Water

Alberta's drinking water comes from either surface water or groundwater. It is important to know the source of your community's water as it will determine:

- The kind of treatment and disinfection your drinking water system must have;
- The equipment needed to access and distribute your water;
- The types of risks your drinking water may face; and
- The planning for your water supplies in the future.

Once wastewater has been treated, it is discharged back into the environment, into either surface water or into the underground field systems. In Alberta, 99.9 percent of all wastewater effluents are destined for surface water repositories.

Surface Water

Surface water for public use is taken from rivers, lakes, or reservoirs, which are replenished by rain and snow. In Canada, 88.5 per cent of municipal drinking water comes from surface water sources. Surface water is more susceptible than ground water to contamination for the following reasons:

- Rivers may flow through farmland, industrial areas, sewage discharge zones, and other
 districts that may cause harmful contamination and/or affect taste, odour, clarity, and
 colour. River water quality will vary throughout the year; and
- Lakes and reservoirs usually have better water quality than rivers as suspended
 contaminants will "settle-out" in lakes. However, lakes and reservoirs are subject to
 plant and algae growth, which can give lake water an unpleasant odour or taste. Human
 activities such as power boats, feed lots, etc., are also a threat. In addition, lakes are
 often fed by rivers that can carry contaminants.

Groundwater

Groundwater is defined as 'water that occurs beneath the surface of the Earth and can be found in most parts of Alberta. In fact, it is estimated that Alberta has more groundwater than surface water, though only 0.01 per cent of this ground water is believed to be recoverable. As such, only approximately three per cent of water licensed in Alberta is from groundwater sources.

Groundwater gathers in aquifers – the layers of sand, gravel, and rock through which water seeps from the surface. Sand and gravel aquifers are usually the most suitable for municipal water systems because there water is more plentiful. Among rock aquifers, sandstone, due to its porosity, can be a good source of groundwater. Alternately, limestone is not porous and may not be a suitable groundwater source unless there are cracks and cavities through which water can move.

In the southern half of Alberta, the Paskapoo aquifer is the most used aquifer system. Of the 200,000 water wells drilled within it, approximately 70,000 are presently active, making this one of the most important aquifers in Western Canada.

Groundwater Under Direct Influence – GWUDI

In addition to groundwater and surface water, there is a third source of water known as GWUDI – groundwater under direct influence of surface water. This is groundwater found below the surface that is in contact with surface water.

An aquifer supplied by GWUDI is viewed in the same category as surface water and has the same treatment and disinfection requirements.

Getting Groundwater to the Surface

Groundwater is sourced through traditional (gravity) well and artesian wells.

- A traditional well is created by sinking a hole or a shaft into the ground to reach the
 water in an aquifer. This water is not under pressure and must be pumped to the
 surface for use; and
- An artesian well taps an aquifer where the water is under pressure and rising from being confined between two containing layers.

A spring forms when groundwater flows naturally from rock or soil onto the surface.

Source Protection in Alberta

Protecting our drinking water sources is one of the key components to Alberta's multi barrier approach – the source-to-tap approach to providing safe, clean drinking water. The source protection process in Alberta helps municipalities and others identify potential threats to sources of drinking water. This allows for better decisions to be made about managing such threats and plans can be developed to protect these vulnerable sources into the future.

Since both surface and groundwater may be drinking water sources, source protection relates to all water resources. As such, these protection requirements are found in a variety of acts and regulations administered by the various levels of government, including:

- The Environmental Protection and Enhancement Act;
- The Water Ac; and
- The Public Health Act

Source protection in Alberta is achieved through watershed planning and may have an impact on a municipality's land use planning rules. For example, regulations may require setbacks from water bodies for various activities or structures that will need to be incorporated into your municipal plans. To learn more about source protection visit

http://environment.alberta.ca/01619.html

Water Treatment Processes

Treatment processes reduce or eliminate the potential for the presence of pathogens, or organisms that can cause illness, in drinking water and wastewater effluent. These processes are used to ensure that your water meets provincial standards.

Different water sources necessitate different levels and methods of treatment to ensure safe, clean water is provided to consumers. In Alberta, all regulated waterworks systems must have a disinfection process in place and all water must be disinfected before it is supplied to the public. The most widely used disinfectant is chlorine, which is a low-cost powerful disinfectant that continues disinfecting as water passes through the distribution system.

Additionally all waterworks systems using surface water or groundwater under direct influence must also provide a filtration process ahead of the disinfection.

Some municipalities also use certain treatment processes to address aesthetic problems with their drinking water – such as taste and odour – but which do not pose a risk to public health. These issues are instead viewed by consumers as objectionable. As well, some municipalities add to the treatment process to address issues that are local in nature, like cyanobacterial bloom control.

Here is a list of the treatment process steps taken in a conventional water treatment plant used to treat surface water:

Intake and	Intake structures are used to draw water from lakes, reservoirs or rivers. Screens are
Screen	used to remove large debris from raw water, such as logs or fish, or other unwanted
	matter (e.g. algae). Screens can also be designed for coarse or fine matter.
Coagulation	Coagulation is a chemical process that causes smaller particles to bind together and
_	form larger particles. The process is used to improve the removal of particles through
	sedimentation and filtration in the drinking water treatment process.
Flocculation	Flocculation is the gathering together of fine particles in water by gentle mixing after
	the addition of coagulant chemicals to form larger particles that can be removed
	through sedimentation and filtration.
Clarification	Clarification is used to remove suspended solids prior to filtration. In Alberta, the most
	common method of clarification is sedimentation – allowing suspended material to
	settle using gravity – but facilities may use the flotation method as well.
Filtration	Filtration is the final particulate removal step in the process. The purpose of filtration is
	to remove any remaining particles in the water by passing the water through a
	granular or membrane filter that retains all or most of the solids on or within itself.
Disinfection	Usually the addition of chlorine to raw or filtered water is to remove or inactivate
	human pathogens, such as bacteria, protozoa, and viruses, or for the purpose of
	maintaining a consistent level of chlorine in the distribution system.

Find Out About Your Waterworks System Treatment Process

To find out what specific treatment processes are used by the facility in your municipality, consult the system approval or registration or meet with your operating authority.

Wastewater Treatment

The wastewater treatment process involves the separation of solid, organic, and chemical waste from wastewater so that it can be safely re-introduced into the environment. In Alberta a variety of treatment options are available – wastewater stabilization ponds or lagoon systems, or mechanical wastewater treatment plants which employ number of process including primary, secondary and tertiary. Not all Albertans are served with the same type of treatment which varies with the population (volume of flow) the systems will have to serve and where the effluent is discharged to and its potential impact on the receiving environment.

Secondary treatment is the most widely used treatment category in Canada, representing 42.4 percent of all sanitary wastewater collection systems. Within the secondary treatment category, smaller municipalities are more likely to use wastewater lagoons for their treatment needs, while communities with populations greater than 50,000 are more likely to utilize a mechanical treatment facility.

In Alberta, more than 3.2 million people are served by approved wastewater systems that are designed to produce treated effluent equivalent to secondary treatment or better. There are 395 wastewater stabilization ponds serving more than 308,661 people and, 103 mechanical facilities serving more 3,226,432 people in Alberta. In fact, according to the *Standards and Guidelines for Municipal Waterworks, Wastewater, and Storm Drainage Systems,* the best practice for municipalities with populations less than 20,000 is secondary mechanical treatment, while municipalities with populations greater than 20,000 should consider tertiary mechanical treatment facilities as a best practice.

Here is a list of the treatment process steps taken in a conventional tertiary mechanical wastewater treatment plant:

Pre-treatment	Solid matter and grit are screened and removed from the wastewater as it passes through aerated tanks. Large rakes separate the larger solids from the influent stream.
Primary Treatment	In deep clarifier tanks, the heavy sludge and particulate matter is given time to settle to the bottom, while the scum rises to the top. The sludge and scum are removed and sent for separate treatment, while the wastewater effluent is sent to the next treatment phase.
Enhanced Primary Treatment	Some treatment facilities have enhanced primary treatment clarifiers that are used during periods of heavy wastewater flow. The use of these clarifiers allows the facilities to take in and treat more wastewater rather than bypassing treatment and directing overflow into the receiving waters.

Secondary	Through physical and biological treatment process up to 90 percent of the
Treatment	organic matter in wastewater is removed to produced effluent quality that is equivalent or better than 25 mg/L Carbonaceous Biochemical Oxygen Demand (CBOD) and 25 mg/L Total Suspended Solid (TSS).
Tertiary	This is an enhancement of the secondary treatment by adding a process to
Treatment	further remove nutrients from treated effluent to obtain a very high quality of effluent and may include effluent disinfection.
Disinfection	Before the effluent is sent to the receiving waters, the clear wastewater effluent is disinfected using UV radiation, chlorine, ozone, or bromine chloride.

Water Distribution and Wastewater Collection

The water distribution system is the collection of pipes, valves, fire hydrants, storage tanks, reservoirs, and pumping stations that carry water to customers.

Water Mains/Piping

Water mains are normally buried in the public street right-of-way. A trunk main is a larger size main used to move large quantities of drinking water and wastewater. The smaller diameter pipe, which connects the trunk main to an individual building, is called a water service main. These smaller pipes contain a buried valve to allow for service shut-off. Water service piping inside the property line is considered plumbing and is outside municipal jurisdiction.

The pipes of the distribution system must be large enough to meet municipal and industrial needs and provide adequate and ample flow for fire protection.

Types of Pipes

The most common types of material used for pipes include:

- Cast-iron Cast-iron pipes have a long history of use. While sturdy, they are also known to be prone to corrosion and breaks;
- Ductile-iron Ductile-iron pipes are becoming widely used, and are considered a newer version of cast-iron piping. These are more flexible and less likely to corrode than their cast-iron counterpart;
- Asbestos-cement Asbestos-cement pipes are not often used, but are appealing
 due to their low-cost and light weight; and
- **Plastic** Polyvinyl chloride (PVC) or polyethylene pipes are widely used today and typically have a longer life than their counterparts.

Valves

Valves are installed at intervals in the piping system so that segments of the system can be shut off for maintenance or repair.

Hydrants

Hydrants are distributed in residential, commercial, and industrial areas, and are primarily used by fire departments in fighting fires. Fire hydrants and system valves should be operated and tested at regular intervals.

Water Storage Facilities

Drinking water storage facilities exist in most municipalities to provide a reserve supply for times of emergency or heavy use (e.g. fire fighting) and can include:

- Elevated tanks (providing water pressure to a system);
- Standpipes (also supply pressure from a high point of land);
- Hydro-pneumatic systems (use air pressure to create water pressure in small systems);
 and
- Surface or in-ground reservoirs (where water can be stored and pumped out for use).

Pumping Stations

Pumping stations are facilities that include equipment designed to help move fluid from one place to another. These are required whenever gravity cannot be used to supply water to the distribution system under the pressure required to meet all of the service demands.

Water Meters

Water meters are used throughout the waterworks and wastewater system to record several amounts, including:

- The amount of water treated and delivered to the water system;
- The amount of water used by the consumer;
- The amount of wastewater entering the system through storm sewers or sanitary mains;
- The amount of wastewater treated and returned to the environment.

Water Distribution Atlas

Your municipality may maintain a water distribution system atlas. These provide detailed mapping of the distribution system and information on infrastructure and maintenance records. Detailed mapping helps your municipality plan for future repairs and is essential for quick response to problems such as water main breaks.

Wastewater Collection

Wastewater Collection systems, usually gravity collection minimum size of 200 millimetres and minimum grade of 0.40 millimetres/100 metre with manholes to provide access to the mains for cleaning purpose (see section 4.1 of S & G).

Summary of Actions You Can Take

- Become further acquainted with drinking water and wastewater legislation and regulations, available on the Government of Alberta Queen's Printer website at www.qp.alberta.ca. Search or browse current law to find what you are looking for. To search, enter the title, or any part of the title, of the law you wish to find (for example, "Environmental Protection and Enhancement Act", "Water Act", or "Wastewater and Storm Drainage Regulation"). If you don't know any part of the title of the law, enter a word or phrase that you think might be in the text of the law;
- Learn about water safety and its link to public health and health of the environment.

 Speak to the waterworks and wastewater system and public health staff to learn more;
- Become familiar with your municipal waterworks and wastewater system. Ask for a
 presentation to be given to council and/or arrange a tour of your water and wastewater
 facilities;
- Inform yourself with the contents of the facility's approval, registration, or code of practice;
- Confirm that all minimum certified operators are on hand when required;
- Develop or become aware of your facility's contingency plan to ensure that operator requirements are met in the case of planned absences, unplanned absences, or changes of staff. Ensure you have a certified operator succession plan in place;
- Ensure there are sufficient resources for the appropriate training and continuing education requirements to be allocated to the municipal staff involved in the operation of the waterworks and wastewater facility;
- Discuss how and when communication will occur with your operating authority;
- Find out what information can be made available to the public and how it should be made available; and
- For more information on what your municipality can do to improve its water conservation efforts read the Alberta Urban Municipalities Association's Water Conservation, Efficiency and Productivity Plan on their website at:
 http://water.auma.ca/digitalAssets/1/1149_AUMA_CEP_plan_Adopted_at_2009_Convention.doc.

Be informed. Ask Questions. Get Answers
It's your Duty!

Appendix A - Liability Based On Specific Provisions In The Legislation

The environmental legislation specifically widens the net of persons who are responsible. Under the heading "Liability of public officials" Section 233(1) Environmental Protection & Enhancement Act provides:

Where a person who is acting under the direction of:

c) a member of a council of a local authority commits an offence under this Act, the...member of council...is also guilty of the offence...if the member of council knew or ought reasonably to have known of the circumstances that constituted the offence and had the influence or control to prevent its commission...

There is an almost identical provision in Section 146 of the Water Act. In both cases the person has a defence if he or she "establishes on a balance of probabilities that the person took all reasonable steps to prevent the commission of the offence."

Liability Based on the Criminal Code

By virtue of section 3 of the Provincial Offences Procedure Act, the provisions of the Criminal Code apply to all provincial legislation unless expressly indicated otherwise.

Section 21 of the Criminal Code extends criminal responsibility beyond the person who committed the offence to persons who contributed to the offence as follows:

- (1) Every one is a party to an offence who
 - (a) actually commits it;
 - (b) does or omits to do anything for the purpose of aiding any person to commit it; or

- (c) abets any person in committing it.
- (2) Where a person counsels another person to be a party to an offence and that other person is afterwards a party to that offence, the person who counselled is a party to the that offence, notwithstanding the offence was committed in a way different from that which was counselled.

The Criminal Code was amended in 1985 to specifically allow for convictions of the party even in situations where the principal could not be convicted. (Section 23.1)

The question of amounts to abetting in the regulatory context was considered by the Ontario Provincial Court in R v. Continental Cablevision Inc. (1974) 19 C.C.C. (2d) 540 in which the decision of the Manitoba Court of Appeal in R. v. Kulbacki [1966] 1 C.C.C. 167 was quoted with approbation:

...the failure of the accused to make any effort to stop or prevent the commission of the offence, when he was in a position to do so and when he had the authority to do so, was equivalent to encouragement on his part.

The notion that a person could be held responsible in the absence of a duty to act is not unique. In R v. Sault Ste. Marie (1978) 40 C.C.C. (2d) 353, the City argued that it had no "duty" to act and therefore should not be held liable for the actions of its contractor. The Supreme Court of Canada disagreed stating at page 376 that... "[t] he law is replete with instances where a person has no duty to act but where he is subject to certain duties if he does act."

Liability Based on the Common Law

Environmental offences fall in the category of strict liability offences. Without going into a lot of detail, a conviction will follow upon proof that the prohibited act occurred; there is no requirement to prove the mental element called *mens rea*. However, the accused may avoid conviction if he or she establishes on a balance of probabilities that all reasonable steps were taken to prevent the offence.

Accordingly, the misfeasance of an employee or agent is visited upon the employer unless the employer can prove he or she exercised proper supervision. In his definitive text Regulatory Offences in Canada, Liability & Defences John Swaigen wrote:

...the employer or principal is punished not for the errors of its employees or agents, but for its own negligence in failing to set up an appropriate system to prevent such errors.

The Supreme Court of Canada in Sault Ste Marie explained the concept in this way:

[A] superior company may not avoid its duty of due diligence by simply contracting out, but can escape a finding of guilt if it is able to establish as a fact that it put in place a proper system for supervising its servants and its contractors.

There are number of examples in the case law where the employer has been held responsible for the actions of the employee because of a failure to properly supervise that employee. (Suncor Millennium, Philip Environmental, Tiger Calcium) While the accused in these cases was a corporation, the same principles would apply to an individual employer.

Misconceptions

While the decision to prosecute is made on the basis of the evidence, not the identity of the accused, unhappily there are some lingering misconceptions:

For example, some officials believe that because a municipality is in effect another branch of government, the municipality and any individuals working for the municipality are immune. That is surprising considering that the leading case in environmental law was the prosecution of the City of Sault Ste Marie based on the actions of its independent contractor.

In Alberta we have certainly prosecuted municipalities; the City of Edmonton twice, the City of Calgary and the County of Lac Ste Anne as well as such as the Mountain View Regional Water Commission and the University of Calgary. We have also prosecuted other Alberta government departments but when these files proceed, they are handled by the federal Department of Justice. Again, while the examples provided deal with the corporate accused, the law would apply also to an individual.

Another misconception is that the prosecution of a government official or another level of government for that matter would not meet the public interest test. While it is counterintuitive to give money from one group of taxpayers to another, the solution lies in the sentencing process. If there is a conviction, rather than imposing a financial penalty, we ask the Court to impose a creative sentencing order to that will benefit the Environment, the taxpayers in that municipality and the citizens of Alberta generally.

There is a third factor at work: the myth that council deliberations in camera are privileged. An example is: An operator knows that repairs need to be undertaken and new equipment purchased but any expenditure more than petty cash has to be approved by Town Council. When the operator makes his pitch, council retires to private chambers to discuss the matter and upon their return, the request is denied without explanation.

It is important to understand that council deliberations are not privileged. Practically speaking, the only privileged communication is between husband and wife and a lawyer and his/her client. Filing the information in a lawyer's office does not protect it. Lawyer's offices can also be the target of a search warrant.

How Can We Dispel These Myths?

The first step is to clearly differentiate between the advice given in the civil arena from that which applies in the criminal arena. In contract law, the parties can specify who is responsible for what. In the criminal context, one cannot contract out of a statutory requirement.

Secondly, by providing examples from the case law, the public officials can better understand their potential exposure. (Regina v. The Town of Beaverlodge, Regina v. West)

Conclusion

A public official may be held accountable for his or her failure to properly supervise employees and agents or by a contribution to the offence through aiding, abetting or counselling.



Appendix B - Websites for Organizations or Programs Associated With the Delivery of Safe Supplies of Drinking Water and Protection of the Environment

Ellanounient						
Alberta Environment & Sustainable Resource Development	http://environment.alberta.ca					
Alberta's Drinking Water Program	http://environment.alberta.ca/1477.html					
Alberta's Water & Wastewater Operator Certification Program	http://environment.albe	rta.ca/01622.html				
Alberta Health and Wellness	http://www.health.alber	ta.ca/				
Alberta Health Services	http://www.health.alber	ta.ca/services/health-regions.html				
MANYA TARANGA MANASA MERBEH MANYANGA SERBASA ANAMAM MERBENJAN PROPOSIO A SERBASA MERBENJAN MERBENJAN MERBENJAN	http://www.transportati					
Alberta Transportation	Alberta Municipal Water/Wastewater Partnership	http://www.transportation.alberta.ca/2719.htm				
	Alberta Municipal Infrastructure Program	http://www.transportation.alberta.ca/2708.htm				
Alberta Water and Wastewater Operators Association (AWWOA)	http://www.awwoa.ab.ca					
Environmental Public Health Manual for Safe Drinking Water	For reprints of the 2007 version contact: Debra Mooney Surveillance and Environmental Health Alberta Health and Wellness 10025 Jasper Ave 24 th Floor, TELUS Plaza North Edmonton, Alberta Debra.Mooney@gov.ab.ca					
Guidelines for Canadian	1	ewh-semt/water-eau/drink-				
Drinking Water Quality	potab/guide/index_e.ht	ml				
Health Canada	http://www.hc-sc.gc.ca					
National Sanitation Foundation	http://www.nsf.org					
Provincial Laboratory of Public Health (Microbiology)	http://www.provlab.ab.ca/					
Source to Tap (National Guidance Document)	http://www.ccme.ca/sourcetotap					
Water Quality Testing for Private Systems	http://www.agric.gov.ab.ca/app21/infopage?cat1=Soil%2FWater%2FAir					



North Red Deer Regional Water Services Commission

5432 56th Avenue Lacombe, Alberta T4L 1E9

Phone: (403) 782-6666 Direct Line: (403) 782-1268 Fax: (403) 782-5655

jthompson@lacombe.ca

May 23, 2013

Attn: NRDRWSC Commission

Re: Operational Report since April 8th to Current

Since the last update provided to members of the Commission (April 8th, 2012), the City of Lacombe has dealt with the following issues:

GENERAL ISSUES

- Responded to 210 Alberta One-Call Locate Requests:
 - March 46
 - April 89

Call-out charges

➤ May 3 - Chris H called by Red Deer treatment plant @ 2:00 am - low level alarm at Pumphouse "C" (Lacombe) - glitch in the level transmitter; level reset itself within 10 minutes; operating normal

Repair response charges:

- April 16 Call from Red Deer treatment plant lost communication with Pumphouse "B" (Lacombe) reset PLC modem, communication restored.
- ➤ May 10 Call from Red Deer Treatment Plant entire network is down; no communication with any site everything back up by 4:00pm
- ➤ May 22 Call from Blackfalds air release valve at Railway is leaking; Brian R cleaned valve; called Emco Waterworks for quotes to repair guts in valve to replace entire unit.

If you have any questions or comments regarding the operations described above please don't hesitate to call or email me.

Sincerely,

Jordan Thompson, CET, PMP

Engineering Services Manager



North Red Deer Regional Water Services Commission

5432 56th Avenue Lacombe, Alberta T4L 1E9

Memorandum

TO: Commission Board Members

FROM: Michael Minchin, Administrator

DATE: May 23, 2013

RE: Administrator's Report – April to May REF: 47/117

2013 2013

The following is a summary of items that have occurred over the past two months:

- The Commission received the 2012 true up calculations from the City of Red Deer. The combined price and volume variances were within the 10% threshold and therefore no credit would be forthcoming.
- The Commission also provided the City with volume forecasts for the next five years as part of the City's long term planning.
- The 2012 audit and year end were completed and all information submitted to the Board and Municipal Affairs.
- Transition continues between Matt Goudy and Jordan Thompson as to duties and responsibilities to the Commission. Matt has stepped back from the water commission to assume duties as the head of the Regional Waste Water Commission.
- Correspondence has been sent to the City and Evratz concerning the possible supply of water to Evratz through the regional water line.

Submitted for Information.

CITY OF LACOMBE

GL Department Report

GL5330

Page :

1 5 b. ii)

Date: May 24, 2013

Time :

10:36 am

Year : 2013 Period : 4 LACOMBE

Budget: FINAL BUDGET

Period: 4						
Account No.	Description	Current	Year To Date	Budget	Variance	% Used
	ATER REPORTING . WATER COMMISSION					
1 REVENUES						
47 Regi	onal Water Revenues					
06-1-47-35110	Water Sales - City of Lacombe	-182,903	-769,379	-2,423,743	-1,654,364	32
	Water Sales - Town of Ponoka	-105,083	-442,930	-1,519,131	-1,076,202	29
	Water Sales - Town of Blackfalds	-85,830	-361,044	-1,164,466	-803,422	31
06-1-47-35140	Water Sales - Ponoka County	-696	-2,729	-13,365	-10,636	20
	Interest Revenue	-2,730	-11,057	-14,910	-3,853	74
06-1-47-55500	Rebates & Dividends	0	0	-50	-50	
06-1-47-85140	Lacombe County Contribution	0	0	-67,000	-67,000	
	Ponoka County Contribution	0	0	-67,000	-67,000	
	47 Regional Water Revenues	-377,243	-1,587,139	-5,269,665	-3,682,526	30
	1 REVENUES	-377,243	-1,587,139	-5,269,665	-3,682,526	30
2 EXPENSES		-311,243	-1,567,139	-5,269,665	-3,002,320	30
	onal Water Operating Expenditures					
_						
	Board Wages-City of Lacombe	350	350	1,750	1,400	20
	Board Wages-Town of Ponoka	150	150	750	600	20
	Board Wages-Town of Blackfalds	150	150	750	600	20
	Board Wages-Lacombe County	0	0	750	750	
	Board Wages-Ponoka County	0	0	750	750	
	Board Travel-City of Lacombe	0	0	500	500	
	Board Travel -Town of Ponoka	32	32	500	468	6
	Board Travel-Town of Blackfalds	15	15	500	485	3
	Board Travel-Lacombe County	0	0	500	500	
	Board Travel-Ponoka County	0	0	500	500	
	Membership Fees	0	0	200	200	
	Postage & Freight	0	0	350	350	
	Telephone - Office	25	101	305	205	33
	Telephone - Operations	669	2,676	9,240	6,564	29
	Management Fees	0	0	48,825	48,825	
	Accounting and Auditor Fees	3,636	10,536	8,875	-1,661	119
06-2-47-23200		0	0	1,000	1,000	
06-2-47-23900	Other Professional Services	294	945	44,100	43,155	2
	Equipment Repair & Maintenance	0	462	15,000	14,538	3
06-2-47-25301	SCADA Maintenance	897	3,588	11,500	7,912	31
06-2-47-27400	Insurance & Bond Premiums	3,233	3,233	5,500	2,267	59
06-2-47-34200	Administration	0	0	6,782	6,782	
	Purchase of Water	275,752	962,870	3,164,828	2,201,958	30
06-2-47-35200	Operations	20,407	20,407	100,000	79,593	20
	Miscellaneous Expenses	0	0	500	500	
	Meeting Supplies	0	0	250	250	
06-2-47-51400	Office Supplies	0	0	250	250	
	General Materials & Supplies	0	137	500	363	27
06-2-47-54400	Utilities-Electricity	414	1,602	5,000	3,398	32
06-2-47-56400		0	0	5,000	5,000	
06-2-47-83100	Debenture Interest	0	37,885	711,164	673,279	5
06-2-47-83200	Debenture Principal	0	28,877	563,737	534,860	5
06-2-47-99000		0	0	465,610	465,610	
ı	47 Regional Water Operating Ex	306,024	1,074,016	5,175,766	4,101,751	21

CITY OF LACOMBE

GL Department Report

GL5330

Page :

2

Time: 10:36 am

Date: May 24, 2013

Year : 2013 Period: 4

Budget: FINAL BUDGET

4							
Account No.	Description	Current	Year To Date	Budget	Variance	% Used	
REGIONAL WAT	ER REPORTING						
	2 EXPENSES	306,024	1,074,016	5,175,766	4,101,751	21	
	Surplus/(Deficit)	-71,219	-513,123	-93,899	419,225	546	
	6 REGIONAL WATER COMMISSION	-71,219	-513,123	-93,899	419,225	546	
REGIONAL W	ATER REPORTING Total	-71,219	-513,123	-93,899	419,225	546	



North Red Deer Regional Water Services Commission

5432 56th Avenue Lacombe, Alberta T4L 1E9

Memorandum

TO: Commission Board Members

FROM: Michael Minchin, Administrator

DATE: May 23, 2013

RE: Agreement with City of Lacombe – REF: 47/117

Operational and Administrative Services (2013)

Further to the Board's resolution at its last meeting in April, the City of Lacombe has prepared a new three year services agreement. With the exception of minor wording corrections, the proposed text for the new agreement reflects that of the previous agreement. The City is not proposing any changes to the scope of work. All changes are highlighted in yellow and red.

Changes have been made to Schedule "D" - Rates. The most noticeable changes are in the monthly charges for Administration and Finance. These costs will increase 12% in the first year followed by annual increases of 4% thereafter. The following is a number changes which have produced this change:

- 1. Higher hourly rates for City administration and finance staff as a result of the most recent salary survey by the City.
- 2. Hours for senior administration staff have been <u>lowered</u> reflecting hours required to manage the Commission.
- 3. Higher finance hours to reflect the actual annual year end requirements.
- 4. Increase in Information Systems to offset the cost of moving the Commission to CaseWare audit software as well as a capital asset management system. The Commission is one five organizations that will benefit from this changeover by the City. The increased cost is the Commission's share of the annual licensing cost. The City is bearing 100% of the acquisition and implementation cost. Increase recognized in first year of \$1500 per year. The Commission should be able to achieve some savings through reduced audit fees with these changes.
- 5. Slight increase in rent and fixed overhead (5%)

Operation costs will increase only by expected wage costs increases over the next three years. Vehicle costs and stand by charges remain the same or incur minor increases. The following tables show the current versus proposed rates and the annual costs. The initial increase is 6% in year one, followed by annual increases of 3% for year 1 and 2. The previous agreement saw increases of 4/4/4%.

Respectfully Submitted.

			City of Lacom	ıbe			
	Regional '	Water Servic	s Proposed A	dmin & C	peration	s Rates	
			1				
						Proposed	
					15-Jun-13	15-Jun-14	15-Jun-15
				Current	to	to	to
				Rate	14-Jun-14	14-Jun-15	14-Jun-16
Monthly	Charges*						
Section 3	.1 General Admin	istration Duties					
(a) Man	agement of Line C	Crossings					
` /	nmunications						
` /	er Rate Calculation	ons					
` '	er Conservation						
Subtotal				\$3,780	\$4,100	\$4,267	\$4,438
Section 3	.1 (b) - Budget ar	nd Financial Super	rision Subtotal	\$551	\$765	\$796	\$828
*All charg	ges are billed mon	thly at the above f	at rate.		ı		
_	n Hourly Charg				I		
Section 3	3.1(i) Operationa			A=45			A-0-701
	Operations Ma	_		\$54/hr		\$58.25/hr	
	Operations Sur			\$54/hr			\$60.50/hi
	Utility Operator			\$27.5/hr			
	On-Call Charg	es		\$4/hr	\$4/hr	\$4/hr	\$4/hı
	4X4 ½ Ton Tr	ual.		¢12 00/b	¢12 00/hm	¢12 6/hm	¢1/11/h
	4A4 72 1011 111	uck		\$13.08/hr	\$13.08/hr	\$13.6/hr	\$14.14/h
Ancillars	Charges						
		all Phones Billed	lirectly to Commis	cion by Cell I	Phone Comr	nans/	
On Can o	e Effergency – Co	cii i nones- biiled	incerty to Continus	Sion by CCII I	none com	Jany	
Section 3	1 (f) - Emergency	v Services (Admin	stration Staff only)	After Hour I	Rate		
beetion 5	.1 (I) Lineigene	y Bervices (7 karim	suddon Stan Only)	\$62.84/hr		\$73.84/hr	\$76.79/bi
				ψ02.0-7/11	Ψ/1/11	Ψ/3.04/11	φ/0.///
Annual (Cost Comparisor	18					
	- Company of						
Monthly	Charges (Admir	n & Finance)		\$51,972	\$58,380	\$60,756	\$63,192
	(1200)			7-29-12	\$6,408	\$2,376	\$2,436
					12%	4%	4%
					12,0	1,0	.,,
Operatio	n Charges						
				\$84,604	\$86,315	\$88,686	\$91,073
				, ,	\$1,712	\$2,370	\$2,388
					2%	3%	3%
					=70	2,0	27
Total				\$136,576	\$144,695	\$149,442	\$154,265
					\$8,120	\$4,746	\$4,824

CONTRACT FOR SERVICES

BETWEEN

THE NORTH RED DEER RIVER WATER SERVICES COMMISSION

(the "Commission")

and

THE CITY OF LACOMBE

(the "Contractor")

Effective June 15, 2013

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Schedule "A" – SKETCH OF REGIONAL WATER LINE

Schedule "B" - OPERATIONAL LICENSE, ALBERTA ENVIRONMENT

Schedule "C - SERVICES AND MAINTENANCE DUTIES

Schedule "D" - RATES

CONTRACT FOR SERVICES

THIS AGREEMENT made effective as of the 15th day of June, 2013.

BETWEEN

THE NORTH RED DEER RIVER WATER SERVICES COMMISSION

(the "Commission")

- and -

THE CITY OF LACOMBE, a municipal corporation incorporated pursuant to the laws of the Province of Alberta (the "Contractor")

RECITALS

WHEREAS the Commission has constructed a Regional Water System from the City of Red Deer to Ponoka serving the communities of the Town of Blackfalds, City of Lacombe, Town of Ponoka, Lacombe County, and Ponoka County;

AND WHEREAS the Commission requires a contractor to provide administration and accounting services for the day to day operations of the Commission.

AND WHEREAS the Commission requires a contractor to provide services to meet the requirements of the conditions of its approval from Alberta Environment.

AND WHEREAS the City of Lacombe is desirous to provide these contract services to the Commission.

IN CONSIDERATION for the premises and the mutual covenants contained in this Agreement, the Parties hereto agree as follows:

ARTICLE 1 TERMINOLOGY

1.1 Definitions

For the purposes of this Agreement, including the recitals and Schedules to this Agreement, the following words and terms shall have the following meanings:

"Agreement" means this Contract for Services, together with the Schedules attached hereto, as amended, supplemented or replaced from time to time in accordance with the provisions hereof;

- "Arbitration Notice" has the meaning given to it in Section 9.3 hereof;
- "Damages" has the meaning given to it in Section 6.1 hereof;
- "Dispute" has the meaning given to it in Section 9.1 hereof;
- "Fees" means the fees identified in Section 7.1 hereof and in the Schedules payable by the Commission to the Contractor for the provision of Services;
- "Force Majeure" means any cause which is beyond the reasonable control of the affected Party including, but not limited to, causes such as flood, earthquake, storm, lightning, fire, epidemic, war, explosion, riot, act of public enemy, act of civil or military authority, civil disturbance or disobedience, strike or other labour dispute, sabotage, restraint by court order, or the action or inaction of, or inability to obtain or renew approvals from, any governmental agency or authority;
- "GAAP" means Canadian generally accepted accounting principles;
- "GST" means the goods and services tax as provided for in the *Excise Tax Act* (Canada), as amended, or any successor or parallel legislation that imposes a tax on the recipient of goods or services supplied under this Agreement and any taxes or fees that may be imposed in replacement or substitution for, or in addition to, such taxes;
- "Indemnifying Party" has the meaning given to it in Section 6.1 hereof;
- "License" shall mean the operating approval issued to the Commission by Alberta Environment.
- "Member" means a member of the Commission.
- "Operational Date" means the date on which the Contractor assumes the operation of the Regional Water Line.
- "**Prime Rate**" means the prime rate of interest established from time to time by the Royal Bank of Canada as the reference rate for Canadian dollar commercial loans in Canada;
- "Regional Water Line" means the regional water system from the City of Red Deer to Ponoka. An outline sketch of the Regional Water Line is attached as "Schedule A" hereto.
- "**Services**" means the services identified in the Schedules to be provided by the Contractor pursuant to this Agreement;
- **"Water"** means the water treated by the City of Red Deer and supplied to the Commission.

"Water Customers" means the Town of Blackfalds, City of Lacombe, Town of Ponoka, Lacombe County, Ponoka County and, where the context requires, their respective water customers.

"Wilful Misconduct" means, in respect of a Party, any act or omission by any of the directors, officers, agents or employees of such Party or by such Party at the direction of its affiliates, directors, officers, agents or employees having management responsibilities which is taken or omitted with knowledge or intent that injury or damage could reasonably be expected to result therefrom.

1.2 Schedules

The following schedules are attached to and incorporated into this Agreement:

Schedule "A" – SKETCH OF REGIONAL WATER LINE

Schedule "B" - OPERATIONAL LICENSE, ALBERTA ENVIRONMENT

Schedule "C - SERVICES AND MAINTENANCE DUTIES

Schedule "D" - RATES

1.3 Revisions to Schedules

The Schedules to this Agreement may be amended by the Parties in accordance with the terms of this Agreement. Schedules that are revised shall show the effective date of the revision and, upon revision, the Contractor shall forthwith provide the Commission a copy of each revised Schedule. This Agreement shall be automatically amended to include any revised Schedule as soon as it is provided by the Contractor to the Commission, or as otherwise agreed between the Parties.

ARTICLE 2 SERVICES, APPOINTMENTS AND AUTHORIZATIONS

2.1 Services

The Commission hereby retains the Contractor, and the Contractor agrees to be retained by the Commission, to provide to the Commission the Services in accordance with the terms and conditions of this Agreement.

2.2 Additional Services

The Parties may, by agreement in writing, provide that the Contractor is to provide services in addition to the Services described in this Agreement.

2.3 Independent Contractor

Except as otherwise specified herein, the Contractor is an independent contractor. All persons, if any, hired or employed by the Contractor to perform services hereunder shall be employees or agents of the Contractor and shall not be construed as employees or agents of the Commission in any respect.

2.4 Affiliates and Agents

The Commission acknowledges and agrees that Services provided hereunder may be provided by, through or under affiliates or agents of the Contractor.

ARTICLE 3 THE CONTRACTOR OBLIGATIONS

3.1 The Contractor's Services

The Contractor's objective is to provide general administration, financial management and maintenance and operational services to the Commission so as to provide a consistent, dependable supply of Water to the Water Customers. The Contractor shall provide the following general services:

- (a) General Administration Duties;
- (b) Budget and Financial Supervision;
- (c) Management of Line Crossings;
- (d) Communication with Member Municipalities and City of Red Deer;
- (e) Water Rate Calculation;
- (f) Emergency Service;
- (g) On Call Duties;
- (h) Water Conservation Management;
- (i) Operation and Maintenance of the Regional Water Line includes meeting the requirements of the Commission Water Operating License (see "Schedule B").

Details of the foregoing services are described in "Schedule C".

3.2 The Contractor's Covenants

With respect to providing the Services under this Agreement, the Contractor covenants and agrees with the Commission to:

(a) devote and cause its employees to devote reasonable commercial efforts and sufficient time, effort and attention as is reasonably required to ensure the proper discharge of the Contractor's obligations under this Agreement and to perform the Services with the degree of skill and care that is required by current, good and sound business, management and professional procedures and practices,

- and conforming to or exceeding with generally accepted business, management and professional standards prevailing in Alberta at the time the Services are performed, to accomplish the objectives of this Agreement;
- (b) ensure that all of its employees who perform services under this agreement shall hold the necessary qualifications, evidence of which shall be provided to the Commission upon request. Following a change of personnel, the Contractor will provide evidence of the qualifications of the new staff within 30 days of their starting to provide services under this Agreement;
- (c) act in good faith toward the Commission;
- (d) comply with the reasonable requests of the Commission Designated Representative which may be made from time to time;
- (e) comply with all Laws, rules, regulations and orders of any legislative body or duly constituted authority having jurisdiction applicable to the Commission's business or the performance of the Services in accordance with this Agreement;
- (f) keep accurate and separate records and accounts in respect of the conduct of the Commission's' business and the performance of the Services under this Agreement in accordance with GAAP; and
- (g) otherwise perform its obligations under this Agreement in accordance with the terms and conditions contained herein.

3.3 Insurance Requirements

- (a) The Contractor shall maintain comprehensive general liability insurance coverage, including products liability insurance coverage, in an amount of not less than \$5,000,000 per occurrence or such other minimum coverage as the Commission may from time to time, acting reasonably, and upon reasonable notice to the Contractor, determine is appropriate. The policy of insurance shall:
 - (i) provide that the Commission is an additional insured;
 - (ii) contain cross-liability and severability of interest clauses;
 - (iii) set out the extent of coverage provided to the Contractor and all exclusions from such coverage; and
 - (iv) not be terminated except on 30 days' notice to the Commission.
- (b) The Commission shall maintain \$5,000,000.00 Comprehensive General Liability Insurance at its expense.

(c) Each of the Parties shall, prior to the execution of this agreement and on the anniversary date of its execution thereafter, provide to the other Party, a certificate of insurance confirming the requirements set out above.

ARTICLE 4 THE COMMISSION'S OBLIGATIONS

4.1 The Commission Responsibilities

The Commission covenants and agrees with the Contractor to:

- (a) at all times designate one or more persons to act as the Commission Designated Representative for the purposes of this Agreement;
- (b) execute and deliver such documents and assurances and perform all acts as may be necessary to permit the Contractor to perform its duties and obligations hereunder, including but not limited to the Contractor's duties as set forth in this Agreement; and
- (c) execute and deliver such documents and assurances and perform all acts and obligations identified in this Agreement or the Schedules hereto, or as may be necessary to enable the Contractor to otherwise perform all of its obligations hereunder.

4.2 Additional Instructions

During the term of this Agreement, the Commission will furnish to the Contractor such additional instructions to supplement this Agreement as may be necessary for the performance of the Services and The Contractor's obligations hereunder. Such instructions shall be consistent with the intent of this Agreement and will be issued by the Commission Designated Representative with reasonable promptness as the circumstances may require.

ARTICLE 5 MUTUAL OBLIGATIONS

5.1 Provision of Information and Access

(a) Both the Contractor and the Commission hereby agree to provide each other in a timely manner with sufficient information to facilitate the discharge of their respective duties hereunder. In particular, the parties will communicate on a daily basis as required with respect to routine operational issues. At the request of the Contractor, the Commission will provide the Contractor access to all facilities, equipment, officers, employees, agents and consultants of the Commission and the opportunity to do all things necessary or convenient in order to facilitate the provision of the Services.

- (b) Notwithstanding the generality of the foregoing, the Commission shall provide to the Contractor copies of all correspondence to or from itself from or to Water Customers in the Commission Service Area or from or to the Alberta Utilities Commission (AUC) relating to the duties and functions in relation to the Services to be performed by the Contractor hereunder and such other information as may be provided without violating applicable Law, and the Contractor shall provide to the Commission copies of all correspondence to or from itself from or to Water Customers of the Commission or from or to any other party relating to services provided hereunder.
- (c) Unless otherwise stated, the expenses incurred by the Party providing the information referred to in this Section will be paid by the Party receiving the information.

5.2 Records

Either Party shall be entitled to examine the accounts, books, logs, charts, records and other recorded data relating to the provision of Services (the "**Records**"), maintained by the other in order to verify any information provided from one Party to the other in connection with this agreement. Both parties shall maintain accurate Records in such a manner as to make available any data reasonably required to verify such information.

ARTICLE 6 INDEMNIFICATION

6.1 Mutual Indemnification

Each Party ("Indemnifying Party") agrees to indemnify and save harmless the other Party, its affiliates, directors, officers, agents or employees from and against all damages, losses, liabilities, claims, costs (including legal costs and reasonable staff costs), fines and penalties that are suffered or incurred by such other Party, its affiliates, directors, officers, agents or employees, which are in any way connected with this Agreement, including liability resulting from injury to or death of any person, or economic damages, which are caused by a breach by the Indemnifying Party of this Agreement, or by the negligence or Wilful Misconduct of the Indemnifying Party, its affiliates, directors, officers, agents or employees acting within the scope of their authority or employment ("Damages"), except that such indemnifying Party, its affiliates, directors, officers, agents or employees, as agreed in writing by the Indemnifying Party or adjudicated by any court or arbitrator or arbitration tribunal having legal jurisdiction in respect thereof.

6.2 Limitation on Liability

Notwithstanding anything to the contrary contained herein, no Party to this Agreement nor its directors, officers, agents or employees will be liable to any other Party to this Agreement, its

directors, officers, agents or employees for any Damages suffered or incurred by such other Party, its directors, officers, agents or employees which are of an indirect or consequential nature ("Indirect Damages"), regardless of whether they arise in contract, tort or otherwise. Without limiting the generality of the foregoing, Indirect Damages will include loss of profits, loss of revenue, loss of production, loss of earnings, loss of contract, cost of capital, loss of any use of any facilities or property operated or owned by any Party and any other indirect or consequential loss or damage whatsoever which are in any way connected with this Agreement. Except to the extent that any Party to this Agreement is required to indemnify and save harmless any other Party to this Agreement, its directors, officers, agents or employees pursuant to Section 6.1, no Party to this Agreement nor any of its directors, officers, agents, or employees will be liable to any other Party to this Agreement for any damages, losses, liabilities, costs (including legal costs), fines, penalties or claims suffered or incurred by such other Party, its directors, officers, agents or employees, howsoever and whensoever caused, whether arising in contract, tort or otherwise, and each Party to this Agreement, for itself and as agent for its directors, officers, agents, and employees, hereby forever releases all other Parties to this Agreement, its directors, officers, agents, and employees from any liability and obligation in respect thereof.

6.3 Exclusion of Liability

For greater certainty and notwithstanding anything else in this Agreement, the Contractor shall not be liable for any damages to any party as a result of an interruption in water services to any member, which is due to causes beyond the control of the Contractor, such as water line breaks, equipment breakdown, or due to Force Majeure.

ARTICLE 7 PAYMENT FOR SERVICES

7.1 Obligation of The Commission

As consideration for the Contractor providing the Services in accordance with this agreement, the Commission shall pay to the Contractor the Fees as set out in Schedule "D".

7.2 Goods and Services Tax

Unless otherwise provided in this Agreement, the Fees shall be exclusive of any GST payable thereon and the Commission shall, in addition to the Fees payable, pay to the Contractor all amounts of GST imposed on the Contractor with respect to the Fees.

7.3 Invoices

The Contractor shall submit Monthly invoices to the Commission on or before the fifteenth (15th) calendar day following the Month in which the Services being invoiced have been provided.

7.4 Remittance

On or before the thirtieth (30th) calendar day of each Month, the Commission shall pay the Contractor the amount of the invoices rendered. If presentation of an invoice by the Contractor

is delayed after the date provided in Section 7.3, then the time for remittance by the Commission shall be extended correspondingly.

7.5 Disputes

Notwithstanding the provisions of this section, if either Party in good faith disputes the amount or any part of the amount payable under any invoice, the Commission shall remit the amount that is not disputed. The Party disputing the amount or any part of the amount payable shall immediately give notice of such dispute pursuant to the provisions of Article 9 hereof.

7.6 Interest

If the Commission fails to make payment of an invoice when due, interest shall be payable on the outstanding balance owing from time to time until paid at the Prime Rate plus two (2) percent per annum. In the event an error is discovered in any invoice rendered by the Contractor, an adjustment and payment therefore shall be made within thirty (30) days of such discovery, failing which interest at the Prime Rate shall be payable to the Party entitled to the payment.

7.7 Other Rights

Each Party reserves to itself all rights, set-off, counterclaims and other defences which it is or may be entitled to at law. These rights shall extend to any amounts for any Services performed, but which have not been reflected in an invoice.

7.8 Payment Schedule

The Fees in respect of the Services shall be invoiced on a Monthly basis in accordance with the rate which is listed for each Service in Schedule "D".

ARTICLE 8 TERM AND TERMINATION

8.1 Term

The Services will be provided to the Commission by the Contractor for a term of three (3) years, from June 15th, 2013 to June 14, 2016 (the "**Term**"). During the period from February 1, 2016 to March 31, 2016, the parties will negotiate in good faith using commercially reasonable efforts to complete a new Contract for Services to replace this Agreement and to become effective June 15, 2016.

Notwithstanding the foregoing the parties shall be entitled to discuss proposed changes to the terms and conditions of this Agreement from time to time during the currency of the Agreement.

In the event that the Parties are unable to negotiate a new contract to replace this Agreement, the Contractor will assist the Commission in the transition required for another party to provide the Services, and the Commission shall reimburse the Contractor for all reasonable costs and expenses, including but not limited to employee and agent time and related expenses incurred by the Contractor to assist the Commission in providing a smooth and timely transition for another party to provide the Services. The foregoing shall not be interpreted so as to prevent the

Commission from commencing negotiations with another party at any time respecting the provision of Services provided by the Contractor under this Agreement.

8.2 Termination

This Agreement shall otherwise terminate on (i) agreement by the Parties; or (ii) the termination of the provision of Services after the Term by either Party; or (iii) on 60 days' notice in writing by either Party. In the event that this Agreement terminates, each Party shall be released from all obligations under this Agreement; provided, however, that any rights, remedies or liabilities that exist or have accrued in favour of any Party shall survive termination, cancellation or expiration of this Agreement.

8.3 Termination Consequences

- (a) On the termination of this Agreement, and at the Commission's request and cost, the Contractor undertakes:
 - i. within a reasonable period of time after termination, to deliver up to the Commission all originals and copies of all correspondence, documents, papers and property belonging to the Commission which may be in the Contractor's possession or under its control; and
 - ii. to provide as complete and accurate an account as possible to the Commission in respect of the Services rendered hereunder within thirty (30) days of the date of termination of this Agreement.
- (b) On the termination of this Agreement, the Commission and the Contractor each undertake to pay to the other all sums which might be due to the other Party under a final accounting between the Parties. Any payments made which have been based on estimated accounts shall be without prejudice to the rights of the Parties under the final accounting between them.

8.4 Effect of Termination

Each Party's right of termination under Section 8.2 is in addition to any other rights it may have under this Agreement or otherwise, and the exercise of a right of termination will not be considered or deemed an election of remedies. Nothing in this Article shall limit or affect any other rights or causes of action that either the Contractor or the Commission may have with respect to the representations, warranties, covenants and indemnities in its favour contained in this Agreement.

ARTICLE 9 DISPUTE RESOLUTION

9.1 Disputes

In the event of any dispute, claim, question or difference (a "**Dispute**") which arises with respect to this Agreement or its performance, enforcement, breach, termination or validity, such Dispute shall be resolved in accordance with this Article.

Either party may forward to the other a written statement of a Dispute and the recipient shall respond to that statement in writing within 10 working days thereafter.

9.2 Senior Officers

Should any Dispute not be resolved to the satisfaction of the Parties within ten (10) Business Days of the Dispute arising, either the Commission or the Contractor may submit to the other Party written notice of the Dispute with supporting documentation as to the circumstances leading to the Dispute ("Notice of Dispute"). Any Notice of Dispute will first be submitted to each of the Member's Chief Administrative Officer and to the Chairperson of the Commission (the "Dispute Representatives"). The Dispute Representatives will meet with a view to resolving the Dispute in accordance with the intent of this Agreement.

If the Dispute Representatives are successful in settling the Dispute, the settlement shall be reduced to writing and be binding on the Parties.

9.3 Arbitration

Failing resolution of all matters in Dispute by the Dispute Representatives within ten (10) Business Days following the submission of the Notice of Dispute to them, either Party may by written notice ("**Arbitration Notice**") delivered to the other Party, submit the Dispute to arbitration to be conducted, except to the extent modified by these provisions, in accordance with the *Arbitration Act* (Alberta), as in force on the date hereof based upon the following:

- (a) any arbitration proceedings shall take place in either Red Deer or Lacombe, Alberta as determined by the arbitrator having regard for maximizing convenience and minimizing costs;
- (b) the Parties will meet within ten (10) Business Days of the delivery of the Arbitration Notice, or if both Parties deliver a written notice within ten (10) Business Days of the date of delivery of the first notice to be delivered, to attempt to agree on a single arbitrator qualified by experience, education and training to determine the Dispute. If the Parties fail to meet or, otherwise are unable to agree on the selection of a single arbitrator within those ten (10) Business Days, then either: (i) the Parties shall agree to make a joint application to the Court of Queen's Bench of Alberta for an order appointing a single arbitrator qualified by experience, education and training to determine the Dispute; or (ii) each Party will select one arbitrator to be a member of an arbitration tribunal made up of three (3)

members. The two arbitrators so selected will, within ten (10) days following their selection, jointly appoint the third member of the arbitration tribunal. If the two arbitrators selected by the Parties are unable to agree on the selection of the third member of the arbitration tribunal within ten (10) days following their selection, those two arbitrators will request that the Alberta Arbitration & Mediation Association, or any successor body thereto, appoint the third member of the arbitration tribunal within ten (10) days following the request. Each arbitrator on the tribunal shall be qualified by education, training and experience to pass upon the particular matter to be decided. No member of the arbitration tribunal shall be a current or former director or officer or a current employee of either of the Parties or have a material interest in either of the Parties or in any matter that is the subject of the Dispute;

- (c) the third member of any arbitration tribunal, howsoever appointed, will be the chair of the arbitration tribunal;
- (d) the arbitrator(s) shall be instructed that time is of the essence in the arbitration proceedings. The single arbitrator or the arbitration tribunal, as the case may be, will proceed as soon as is practicable to hear and determine the Dispute, and will be directed by the Parties to provide a written decision resolving the Dispute within fifteen (15) days following the selection of the single arbitrator or the third member of the arbitration tribunal or such other date as may be agreed in writing by the Parties. The Parties will provide such assistance and information as may be reasonably necessary to enable the arbitrator or the arbitration tribunal, as the case may be, to determine the Dispute. Any decision of the single arbitrator or arbitration tribunal, as the case may be, other than for determinations relating to whether or not a Party's conduct constitutes gross negligence or Wilful Misconduct, shall be final and binding upon all Parties, with no right of appeal therefrom and subject to Section 9.5 below, shall deal with the question of costs of arbitration and all related matters. Any determination of the single arbitrator or arbitration tribunal relating to whether or not a Party's conduct constitutes gross negligence or Wilful Misconduct may be appealed by any Party to the Court of Oueen's Bench of Alberta;
- (e) the arbitrator or arbitration tribunal will provide written reasons for the decision although the decision may be issued prior to providing those reasons. Written reasons for the decision will be provided as soon as possible, but implementation of and compliance with the decision will not be delayed pending the issuance of the reasons;
- (f) judgment upon any award of the arbitrator or the arbitration tribunal, as the case may be, may be entered in any Court having jurisdiction or application may be made to the Court for a judicial recognition of the award or an order of enforcement, as the case may be; and

(g) all Disputes referred to arbitration (including the scope of the agreement to arbitrate, any statute of limitations, set-off claims, conflict of laws rules, tort claims and interest claims) shall be governed by the substantive law of Alberta.

9.4 Continued Compliance

While any Dispute is being resolved, the Parties will continue to perform all obligations under this Agreement with due diligence and will continue to comply with all terms of this Agreement.

9.5 Costs

Each Party shall be responsible for all costs, including legal costs incurred by it in resolving any Dispute under this Article provided however that the decision of the arbitrator or arbitration tribunal relating to costs shall deal with the fees and other costs of the arbitrator or arbitration tribunal as the case may be.

ARTICLE 10 CONFIDENTIALITY

10.1 Information is Confidential

All information provided to the Contractor by the Commission under this Agreement pertaining to or arising from the provision of Services or to servicing the Water Customers in accordance with this Agreement, will be considered confidential information and the Contractor shall take all reasonable precautions to ensure its directors, officers, employees, representatives, consultants and agents, and those of its affiliates (collectively "**Representatives**") do not, at any time disclose any of the Confidential Information to any other person without the prior written consent of the Commission. Such consent is not required to the extent that the Confidential Information is otherwise in the public domain or either of the parties is legally compelled to disclose such Confidential Information to a court or regulatory authority in the proper exercise of its jurisdiction, or otherwise legally compelled to disclose such Proprietary Information in accordance with the *Freedom of Information and Protection of Privacy Act* (Alberta), or any equivalent or replacement legislation.

The Contractor agrees that any Confidential Information provided by the Commission to the Contractor shall be maintained in data banks, computers or other information systems owned and operated by the Contractor or its agents or affiliates.

10.2 Use of Confidential Information

Confidential Information will not be used for any reason or purpose other than for the purposes of this Agreement.

10.3 Notice of Demands

The Contractor will provide prompt notice to the Commission of any demands by a governmental authority or third party to disclose or provide any Confidential Information, prior to making any such disclosure and so as to afford the Commission an opportunity to seek injunctive relief or protection from the need to disclose.

10.4 Survival

These confidentiality provisions will continue and survive for a period of two (2) years after the termination of this Agreement.

ARTICLE 11 MISCELLANEOUS

11.1 Warranty

Each of the Parties warrants to the other Party that:

- (a) it is duly incorporated and validly subsisting under the laws of its jurisdiction of incorporation and is duly registered or otherwise qualified to do business in each jurisdiction required to perform its obligations under this Agreement;
- (b) it has full corporate power and capacity to enter into and perform its obligations under this Agreement;
- (c) this Agreement has been duly authorized, executed and delivered by it and is a valid, legal and binding obligation on it enforceable against it in accordance with the terms of this Agreement, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally and to the equitable and statutory powers of the courts having jurisdiction; and
- (d) it is not bound by any contractual restriction prohibiting it from entering into and performing its obligations under this Agreement.

11.2 Entire Agreement

This Agreement contains the entire agreement and understanding between the Parties with regard to the matters contained herein. It merges, replaces and supersedes all prior agreements, commitments, representations, writings, and discussions between the Commission and the Contractor, whether oral or written, relating to the subject matter hereof.

11.3 No Waiver

No waiver by any Party of any default by the other under this Agreement shall operate as a waiver of any continuing or future default, whether of a like or different character.

11.4 The Commission Designated Representative

The person designated by the Commission to act as the Commission Designated Representative for purposes of administering this Agreement and engaging in discussions with the Contractor regarding performance under this Agreement is:

Commission Chairperson

Telephone: (403) 782-6666 Facsimile: (403) 782-5655

11.5 Notice

Other than as specified in any Schedule, any notice or other communication to be given under this Agreement must be in written form and may be given (i) by personal delivery, or (ii) by a form of secure telecommunication (such as FAX) which reproduces a writing at the point of reception. Any such notice or communication will be addressed to the attention of the addressee named below, and delivered to the address of the addressee or sent to the facsimile number of the addressee specified below:

(a) for the Commission: **North Red Deer River Water Commission**

Attention: Chair 5432 – 56 Avenue Lacombe, Alberta

T4L 1E9

Telephone: (403) 782-6666 Fax: (403) 782-5655

(b) for the Contractor: **City of Lacombe**

5432 - 56 Avenue Lacombe, Alberta

T4L 1E9 Attention:

Email: mail@lacombe.ca Telephone: (403) 782-6666 Fax: (403) 782-5655

A Party may change its address for notice from time to time by giving written notice of such change to the other Party in accordance with this Section. Any request, notice, statement, invoice or other document made, given or delivered hereunder shall be sufficiently made, given or delivered hereunder if sent by facsimile or if delivered by hand to the addressee named above. If sent by facsimile, if shall be deemed to be received on the day of transmission if sent during the normal business hours of the recipient, failing which it shall be deemed to be received on the following business day.

11.6 Relief for Force Majeure

Notwithstanding anything else contained in this Agreement, neither Party will be considered to be in default in the performance of any of its obligations under this Agreement where such failure to perform is due to an event of Force Majeure.

11.7 Amendments

This Agreement may not be modified, altered or amended except by an instrument in writing signed by each of the Parties.

11.8 Assignment

- (a) Neither Party may assign all or part of its interest in this Agreement to any other Person without the prior written consent of the other Party.
- (b) In the event of an assignment by the Contractor, the Contractor shall be released from all of its obligations pursuant to this Agreement.

11.9 Enurement

This Agreement shall enure to the benefit of and be binding upon the Parties hereto and their respective successors and permitted assigns.

11.10 Governing Law and Attornment

This Agreement shall be governed by and interpreted in accordance with the laws of the Province of Alberta and the laws of Canada applicable therein.

This Agreement has been executed by the Parties with effect as of the 15th day of June, 2013.

Per:	
Per:	
CITY OF LACOMBE	
Per:	
Dar	

NORTH RED DEER RIVER WATER COMMISSION

SCHEDULE "A" REGIONAL WATER LINE

SCHEDULE "B" OPERATIONAL LICENSE ALBERTA ENVIRONMENT

SCHEDULE "C" SERVICES AND MAINTENANCE DUTIES

To further clarify the responsibilities of the Contractor in the services to be provided to the Commission as outlined in Section 3.1, the Contractor, as part of its duties, obligations and responsibilities shall:

1. General Administration Duties

The Contractor shall provide the following general administration and support for the Commission:

- a. Commission Administration
 - i. Create meeting agendas for Commission meetings;
 - ii. Oversee preparation of Commission meeting minutes and bylaws
 - iii. Policy Administration
 - 1. Operational
 - 2. Financial
 - 3. Governance
 - iv. File returns and reports to the Province of Alberta including all annual financial and operating reports required by Alberta Municipal Affairs in accordance with the Department's guidelines and the provisions of the Municipal Government Act, R.S.A, c.M-26.
 - v. General records management duties for the Commission
 - vi. Customer Service and Inquiries
- b. Insurance & Risk Management
 - i. Administration of General Liability Insurance Policy
 - ii. Administration of Property & Fire Insurance Policy
 - iii. Administration of Board Liability Insurance Policy
- c. Coordination of Service Agreements including all third party contracts on behalf of the Commission including for example contracts with consultant engineering, legal counsel, and telephone, electrical and natural gas supply contracts.

Where directed by the Commission, the Contractor will also undertake any issuance for request for proposals or invitation for tenders for any service required by the Commission.

d. Office and Information Systems Support

The Contractor shall be responsible for providing office and information systems resources in support of providing services to the Commission. These services include:

- i. Office Space & telephones (Land line telephones Only)
- ii. Accounting Software and all desktop computers
- iii. Internet access
- iv. IT Support for two SCADA system laptops owned by the Commission.

2. Budget and Financial Supervision

The Contractor shall be responsible for budget and financial supervision duties in the following areas:

a. Preparation of Budgets

i. Operating & Capital Budget

The Contractor will ensure that the Commission's Annual Operating Budget and Annual Capital Budget are prepared for Commission's consideration in accordance with the Municipal Government Act, RSA, c. M-26.

ii. Multi-Year Capital

The Contractor will also develop long term Multi-Year Capital Plan to address Capital Asset replacement and service expansion needs.

b. Bookkeeping Functions

i. Vendor Invoices

The Contractor will review, approve, and submit payment for all vendor invoices of the Commission in accordance with the Commission's Purchasing and Expenditure Policies.

ii. Customer Invoices

The Contractor will prepare and issue all customer invoices to member municipalities and other customers as required. The Contractor will also collect payment for all invoices.

iii. Goods and Services Tax (GST)

The Contractor will maintain the Commissions' GST account and will complete all semi-annual reporting and remittances as required by Canada Revenue Agency.

iv. Payroll

The Contractor will complete and submit any necessary payroll remittances and reporting as required by Canada Revenue Agency.

c. Bank Reconciliation

The Contractor will maintain the Commissions' bank accounts and conduct monthly bank reconciliations in a timely manner.

d. Quarterly Financial Statements

The Contractor will ensure that the Commission receive quarterly financial statements and administration reports at its quarterly board meetings.

e. Annual Financial Statements and Financial Information Return

The Contractor will ensure that the annual Financial Information Return (FIR) and the annual financial statements are prepared in final form in accordance with generally accepted accounting principles and any other required regulations, as required in the current audit engagement contract.

The Contractor will submit the completed FIR and annual financial statements to the Commissions' appointed auditor for preparation of the auditor's report in accordance with the guidelines outlined in the Municipal Government Act, RSA 2000, c. M-26.

f. Annual Audit

The Contractor will liaise with the Commissions' appointed auditor to ensure that the annual audit is conducted in an efficient and effective manner as in accordance with the guidelines outlined in the Municipal Government Act, RSA 2000, c. M-26.

The Contractor will be responsible for the internal controls for the Commission and will work with other Contractor's staff providing financial services to ensure that policies and procedures are followed.

3. Management of Line Crossings

The Contractor will work diligently to ensure the Commission's infrastructure is protected when other utilities cross or parallel the line. The Contractor will be responsible for the following areas:

- a. Coordination of Utility Alignments
- b. Maintain and Update Drawings/Records including electronic formats

4. Communicate with Members & City of Red Deer

The Contractor will provide the following communication services:

- a. Meet with member municipalities to determine future water consumption forecasts.
- b. Meet with City of Red Deer to review annual rate structures.
- c. Communicate rate structure and any changes thereof to member municipalities.
- d. Meeting with Member Municipalities
 When directed by the Commission, the Contractor will attend any member
 municipality's council or committee meetings to address any service issues or to
 explain the Commission's water rates.

5. Water Rate Calculations

The Contractor will provide the following water rate calculation services to the Commission:

- a. Review annual rate submission from the City of Red Deer and their supporting detail and ensure the rates have been prepared in accordance with the Utility Rate Model as outlined by the American Water Works Association and the Public Utilities Board.
- b. Develop water rates annually, based on expected water volume sales, operating costs, and required capital expenditures of the Commission in accordance with the Cash Rate Model or any other model approved by the Commission.
- c. Provide recommendations to the Commission on water rate policies.

6. Emergency Services

Emergency services would be provided by as required during on call hours. Emergency services would include:

- a. Respond to requests from member municipalities in the event of a water shortage or service interruptions.
- b. Respond to any water quality or contamination issues.
- c. Provide notification and coordinate with other member communities, the Commission, and the City of Red Deer.

7. On Call Duties

The Contractor shall provide twenty-four (24) hour a day, 365 a year on call coverage as required by qualified water operators.

If required, call outs of management level staff will be provided on an hourly basis for any after hours (hours outside of 8 am to 5 pm – Monday to Friday and excluding statutory holidays) situations that require managements immediate attention. These hours will be billed out as identified in "Schedule D"

8. Water Conservation Management

The Contractor will provide the following water conservation management services to the Commission:

- a. Develop a Public Awareness & Education campaign in coordination with other member Communities
- b. Develop rate structures that encourage water conservation
- c. Investigate the Commission's infrastructure to identify any opportunities to minimize water loss and track unaccounted for water

9. Operation and Maintenance of the Regional Line

The Contractor will provide the following Operation & Maintenance services:

- a. Daily Operational Requirements.
 - i. Respond to Locate Requests.
 - ii. Be responsible for the operation, maintenance and repair of all of the Commission Regional Water System and any lateral systems.
 - iii. Provide day-to-day supervision of the operation of the Commission Regional Water System.
 - iv. Provide preventive maintenance to ensure continuous and satisfactory service to all customers.
 - v. Co-ordinate with the Commission's consulting engineers and the Commission's management for effective operation and maintenance of the Commission's Regional Water System.

- vi. Engage such contractors as necessary to assist with the repair and maintenance of the Regional Water System.
- vii. Consult with the Commission's consulting engineers on matters of maintenance, repair and service connections.
- viii. Provide regular and on-call personnel to respond to all routine and emergency requirements and co-ordinate remedial action.
- ix. Coordinate and perform the scheduled maintenance and operations as outlined and detailed in the operating manuals for the Commission as prepared by the consulting engineer for the Commission.
- x. Establish a list of contractors for the specialty repair or services for the following:
 - 1. Repair of water line breaks
 - 2. Repair of instrumentation and controls;
 - 3. Repair of mechanical piping, building services and pumping; and
 - 4. Cathodic protection inspection.
- xi. Conduct in-house training on operations, safety, and housekeeping to ensure an efficient and physically attractive site operation.

b. Weekly Operational Requirements

i. Weekly Inspections

Inspection of the Regional Water System will be carried out once a week in accordance with the Commission's operating manuals.

ii. Weekly Water Samples

Water samples are collected along the line from Ponoka to Red Deer. These water samples are tested for quality assurance and system integrity.

Nine tests are taken to determine residual chlorine at key locations along the line.

iii. Records Management

Records/logs will be kept to maintain a database of test results and line inspections. These records will be kept in a secure location, and will be available to the Commission whenever required.

Provide operational reports to Alberta Environment as required.

c. Monthly Operational Requirements

i. Month End Readings

Readings are taken at month's end to determine water demand at each of nine stations. A tenth reading is taken at the meter vault in Red Deer so the results can be compared for accuracy.

ii. Monthly Reporting

Provide monthly reports to the Commission related to operational details. Recommend system improvements and policies that would be a betterment to the Commission's operations.

Attend Commission meetings at the request of the Commission.

d. Yearly Operational Requirements

i. Year End Reports

As per Alberta Environment regulations, the Commission must submit and maintain records of the following reports:

- -Monthly reports for each month of the year
- -Sampling records, including location, date, and results
- -THM chemical analysis reports

The Contractor will prepare these reports and ensure their compliance with applicable legislation from both Alberta Environment and the Canadian Environmental Protection Agency

ii. Distribution License

The Contractor will ensure that the Commissions Distribution license registration number from Alberta Environment is current and that the all

activities engaged in the Commission or its contracted services fall within the guidelines of the license.

The Contractor will ensure that any new or renewal applications required to keep the license current are completed prior to expiration of the current license.

SCHEDULE "D"
RATES

In consideration for the services provided by the Contractor to the Commission, the Commission agrees to pay the following for said services provided:

Contract Year

June 15	June 15	June 15
2013	2014	2015
June 14	June 14	June 14
2014	2015	2016

Monthly Charges*

Section 3.1(a) General Administration Duties

- (c) Management of Line Crossings
- (d) Communications
- (e) Water Rate Calculations
- (h) Water Conservation Subtotal

\$4,100	\$4,267	\$4,438

Section 3.1 (b) Budget and Financial Supervision Subtotal

\$765	\$796	\$828

^{*}All charges are billed monthly at the above flat rate.

Operation Hourly Charges

Section 3.1(i) Operational & Maintenance

Operations Manager	\$56/hr	\$58.25/hr	\$60.50/hr
Operations Supervisor	\$56/hr	\$58.25/hr	\$60.50/hr
Utility Operator	\$31.5/hr	\$32.75/hr	\$34.00/hr
On-Call Charges	\$4/hr	\$4/hr	\$4/hr
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4X4 ½ Ton Truck	\$13.08/hr	\$13.6/hr	\$14.14/hr

Ancillary Charges

On Call & Emergency – Cell Phones - Billed directly to Commission by Cell Phone Company

Section 3.1 (f) Emergency Services (Administration Staff only)

After Hour Rate \$71/hr \$73.84/hr \$76.79/hr

All prices are exclusive of GST. GST will be added at time of billing.